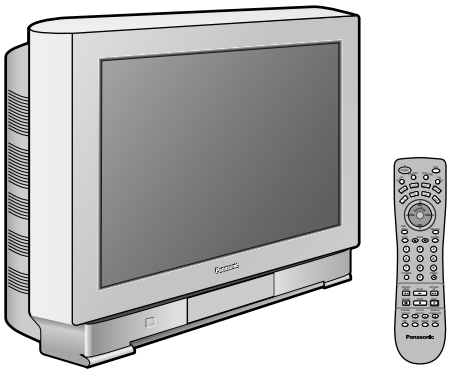

Panasonic®

# Wide Screen TV
# Operating Instructions

## CT-30WX52
Model No. **CT-34WX52**

| |
|---|
| **For assistance, please call : 1-888-VIEW-PTV(843-9788)**<br>**or send e-mail to : consumerproducts@panasonic.com**<br>**or visit us at www.panasonic.com** **(U.S.A)** |
| **For assistance, please call : 787-750-4300**<br>**or visit us at www.panasonic.com** **(Puerto Rico)** |
| **For assistance, please call : 1-800-561-5505**<br>**or visit us at www.panasonic.ca** **(Canada)** |

**English**

TQBC0385-1

The lightning flash with arrow-head within a triangle is intended to tell the user that parts inside the product are a risk of electric shock to persons.

The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the papers with the appliance.

**WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Do not place liquid containers (flower vase, cups, cosmetics, etc.) above the set. (including on shelves above, etc.)**

**WARNING:** 1) To prevent electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

2) Do not remove the grounding pin on the power plug. This apparatus is equipped with a three pin grounding-type power plug. This plug will only fit a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician.
Do not defeat the purpose of the grounding plug.

BBE® High Definition Sound

Manufactured under license from BBE Sound, Inc.
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BBE and BBE symbol are registered trademarks of BBE Sound, Inc.

# Important Safety Instructions

1) Read these instructions.
   All the safety and operating instructions should be read before the appliance is operated.
2) Keep these instructions.
   The safety and operating instructions should be retained for future reference.
3) Heed all warnings.
   All warnings on the appliance and in the operating instructions should be adhered to.
4) Follow all instructions.
   All operating and use instructions should be followed.
5) Do not use this apparatus near water.
   For example, near a bathtub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.
6) Clean only with dry cloth.
   Do not use liquid cleaners or aerosol cleaners. Use a dry cloth for cleaning.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
   Slots and Openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
   This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments / accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart / apparatus combination to avoid injury from tip-over.
    Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.
    This will prevent damage to the product due to lightning and power-line surges.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

**CAUTION :** This TV set is intended to be used with the following TV stand: model TY-S30WX52 for the CT-30WX52, and TY-S34WX52 for the CT-34WX52. Use with other stands may result in the TV set becoming unstable, possibly causing injury.

# *Dear Panasonic Customer*

*Welcome to the Panasonic family of customers. We hope that you will have many years of enjoyment from your new color television set.*
*To obtain maximum benefit from your set, please read these Instructions before making any adjustments, and retain them for future reference.*
*Retain your purchase receipt also, and record the model number and serial number of your set in the space provided on the back cover of these instructions.*

*Visit our Panasonic Web Site for USA : www.panasonic.com*
*for Puerto Rico : www.panasonic.com*
*for Canada : www.panasonic.ca*

| | |
|---|---|
| **For assistance, please call : 1-888-VIEW-PTV(843-9788)**<br>**or send e-mail to : consumerproducts@panasonic.com**<br>**or visit us at www.panasonic.com** | **(U.S.A)** |
| **For assistance, please call : 787-750-4300**<br>**or visit us at www.panasonic.com** | **(Puerto Rico)** |
| **For assistance, please call : 1-800-561-5505**<br>**or visit us at www.panasonic.ca** | **(Canada)** |

**Note:**
This product utilizes both a Cathode Ray Tube (CRT) and other components that contain lead. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling information please contact your local authorities, or the Electronics Industries Alliance: <http:// www.eiae.org.>

**FCC CAUTION:**
Pursuant to 47CFR, Part 15.21 of the FCC rules, any changes or modifications to this TV not expressly approved by Matsushita Electric Corporation of America could result in harmful interference and would void the user's authority to operate this device.

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# Installation

## Receiver Location

This unit is intended to be used with an optional stand or entertainment center. Consult your dealer for available options. Locate for comfortable viewing. Avoid placing where sunlight or other bright light (including reflections) will fall on the screen.
Use of some types of fluorescent lighting can reduce remote control transmitter range.
Adequate ventilation is essential to prevent internal component failure. Keep away from areas of excessive heat or moisture.
To ensure optimum color purity do not position magnetic equipment (motors, fans, other speakers, etc.) nearby.

## Optional External Equipment

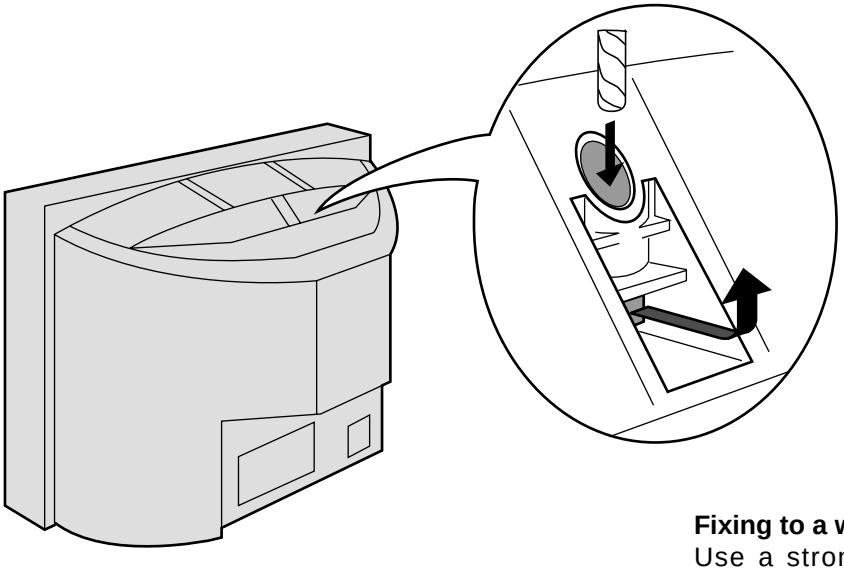
The Video/Audio connection between components can be made with shielded video and audio cables. For best performance, video cables should utilize 75 ohm coaxial shielded wire. Cables are available from your dealer or electronic supply store. Before you purchase any cables, be sure you know what type of output and input connectors your various components require. Also determine the length of cable you will need.

## AC Power Supply Cord

**CAUTION:** To prevent electric shock, match wide blade of plug to wide slot of AC outlet and fully insert. Do not use this (polarized) plug with a receptacle or other outlet unless the blade can be fully inserted to prevent blade exposure.

## Safety Precaution

Please take safety precautions to prevent the unit from falling over.
The unit may fall over during earthquakes, or if someone stands on or shakes the TV.

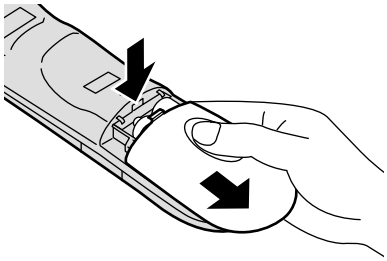


**Fixing to a wall**
Use a strong rope or a chain (not included) to fasten the TV firmly to a strong support such as a wall or pillar.

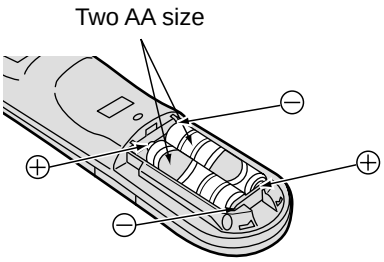
# Remote Control Battery Installation

Requires two AA batteries.

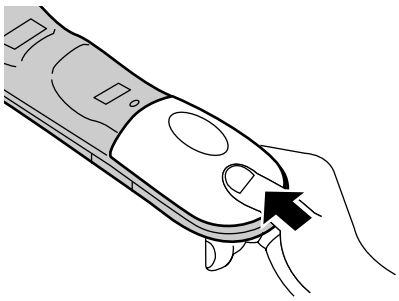
1. Turn the Transmitter face down. Remove top cover by pressing down on marking and sliding cover off in the direction indicated.



2. Install the batteries as shown in the battery compartment. (Polarity + or – must match the markings in the compartment).




3. Replace the cover and slide in reverse until the lock snaps.



| *Helpful Hints:* |
|---|
| For frequent remote control users, replace old batteries with alkaline batteries for longer life. |
| **Note: In order to maximize the life of the batteries, the lighted buttons on the Remote Control can be turned OFF and ON by pressing R-TUNE and RECALL at the same time.** |

## ⚠ Precaution on battery use

Incorrect installation can cause battery leakage and corrosion that will damage the remote control transmitter.
**Observe the following precautions:**

1. Batteries should always be replaced as a pair. Always use new batteries when replacing the old set.
2. Do not combine a used battery with a new one.
3. Do not mix battery types (example: “Zinc Carbon” with “Alkaline”).
4. Do not attempt to charge, short-circuit, disassemble, heat or burn used batteries.
5. Battery replacement is necessary when remote control acts sporadically or stops operating the TV set.

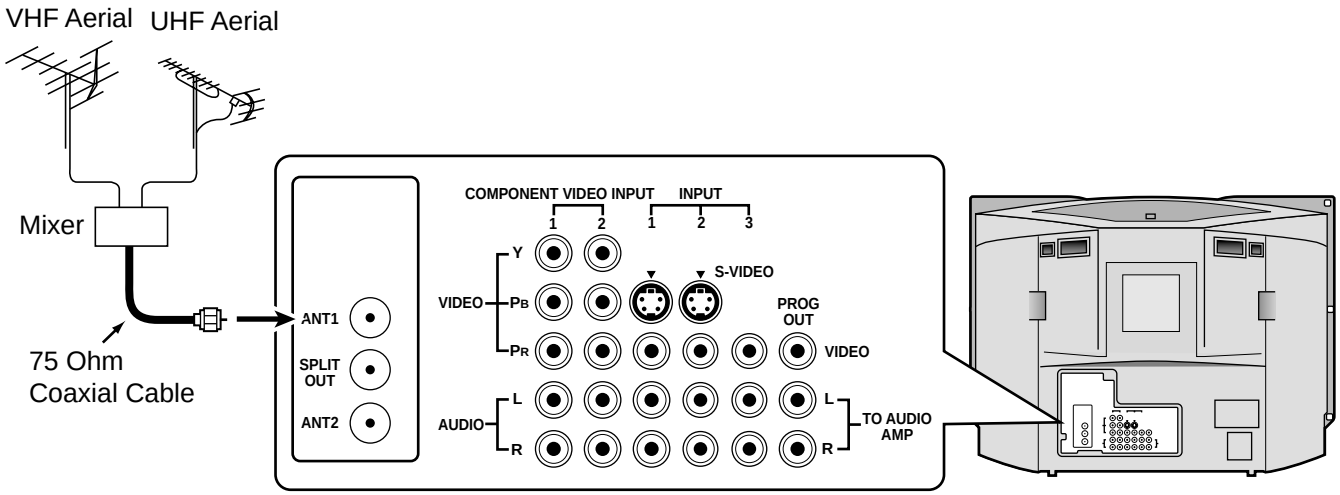
| *Helpful Hints:* |
|---|
| Whenever you remove the batteries, **you may need to reset the remote control infrared codes.** We recommend that you record the code on page 64, prior to setting up the remote control. |

# Cable Connection

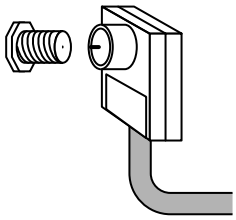
## Connecting the Aerial cable to the RF In Terminal

### Antenna Connection

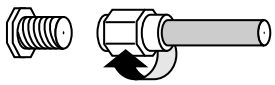
- For proper reception of VHF/UHF channels, an external antenna is required. For best reception, an outdoor antenna is recommended. Antenna Mode must be set to TV.
- Incoming Cable from Home Antenna
  Connect home antenna to ANT1 connection on back of television. Select TV mode and ANT1 in the SET UP menu.
  ( Cable Mode is preset at the factory. Antenna users must change to TV mode and select ANT1 in the Set Up Menu under Prog chan.)




Incoming Cable from Home Antenna



Incoming Cable from Cable Company



75 Ohm VHF/UHF on back of TV

**Note:** Certain cable systems offset some channels to reduce interference or have Premium (scrambled) channels. A cable converter box is required for proper reception. Check with your local Cable company for its compatibility requirements.

**Notes:**

(1) To obtain optimum quality picture and sound, an Aerial, the correct cable (75 Ohm coaxial) and the correct terminating plug are required.

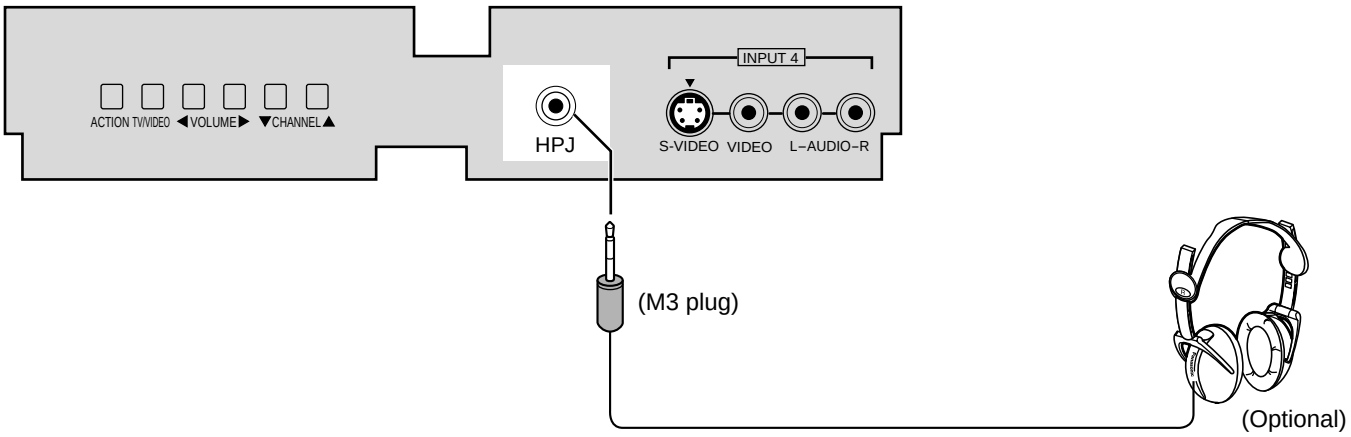
(2) If a communal Aerial system is used, you may require the correct connection cable and plug between the wall Aerial socket and your television receiver.

(3) Your local Television Service Centre or Dealer may be able to assist you in obtaining the correct Aerial system for your particular area and the accessories required.

(4) Any matters regarding Aerial installation, upgrading of existing systems or accessories required, and the costs incurred, are the responsibility of you, the Customer.

# Connecting Headphones / Earphones

**Connect headphones / earphones as follows.**

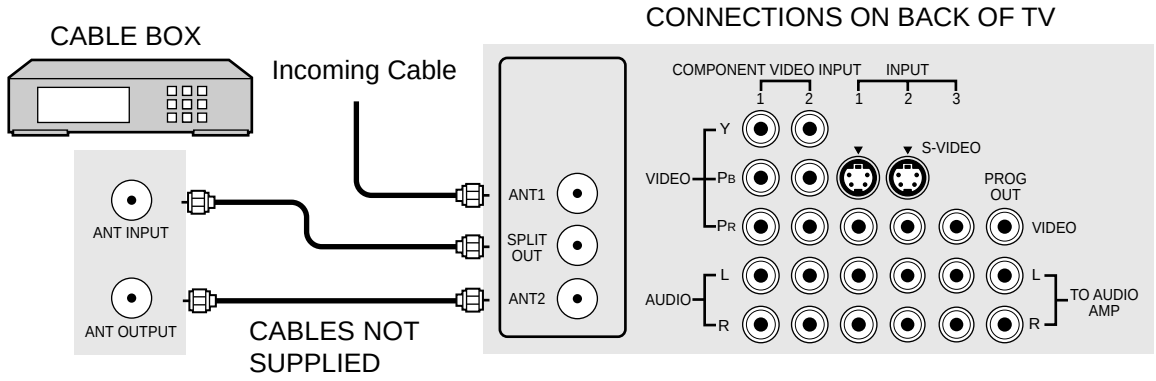



You can listen to sound from the headphone Jack.

# Optional Equipment Connections

## Cable Box Connection

Follow this diagram when connecting your television to a cable box only.




**Note:** The remote control must be programmed with supplied codes to operate the cable box (see page 66).

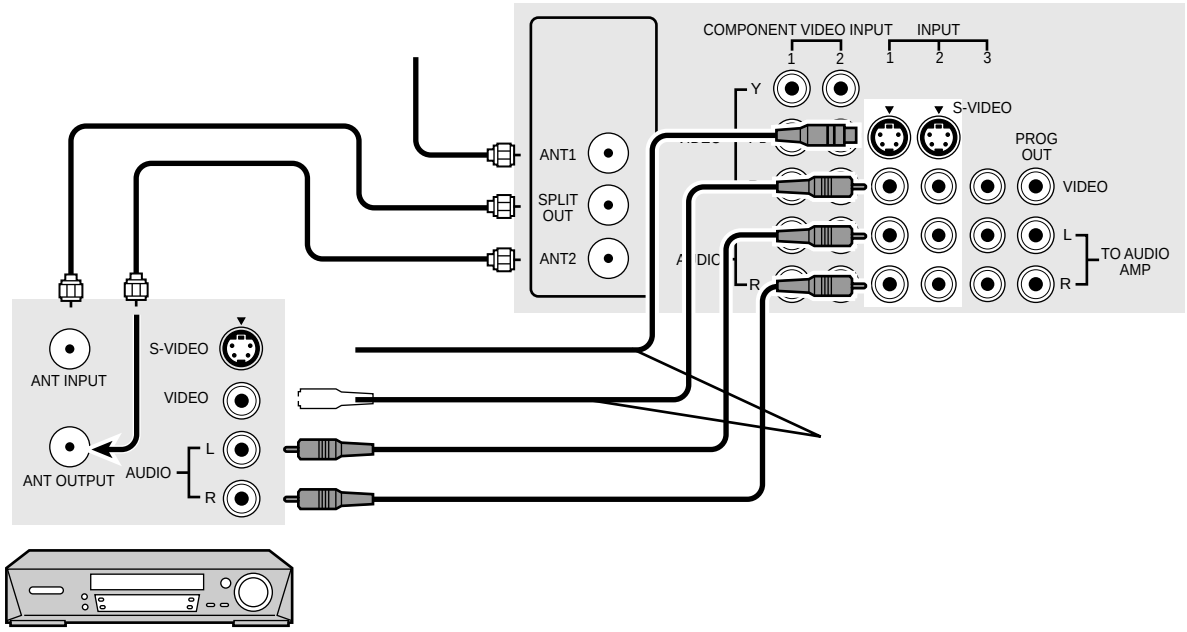
**Viewing a premium (scrambled) cable channel**

**Procedure**

1. Select ANT2 in the SET UP menu under Prog Chan (Program Channels).
2. Tune the television to Channel 3 or Channel 4.
3. Using the cable box, tune to the premium cable channel you would like to view.

**Note:**
To use special features such as Favorite Channels and Channel Captions, ANT1 must be selected in the SET UP menu under Prog Chan (see page 23).

Follow this diagram when connecting your television to a VCR only.




**Note:** The remote control must be programmed with supplied codes to operate the VCR (see page 64, 65).

**Viewing a television program**

**Procedure**

1. Select ANT1 in the SET UP menu under Prog Chan (Program Channels).
2. Tune the television to the television program you would like to view.

**Viewing a video**

**Procedure**

- Option A
  1. Press the TV/VIDEO button on the remote control to select the video input (VIDEO 1, VIDEO 2, etc.) connected to your VCR.
  2. Begin the video.
- Option B
  1. Select ANT2 in the SET UP menu under Prog Chan.
  2. Tune the television to Channel 3 or 4, depending on your VCR.
  3. Begin the video.

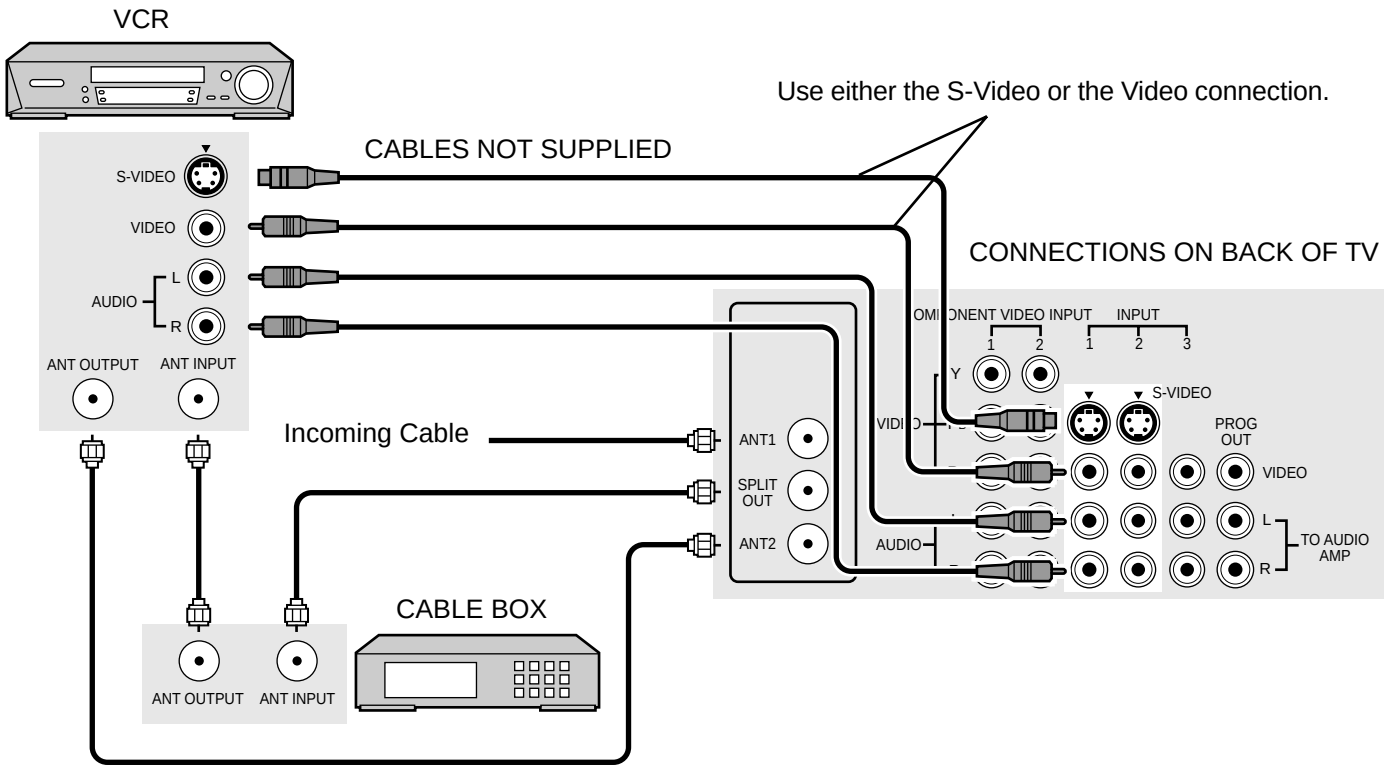
**Recording a television program**

**Procedure**

- Option A (Recording and viewing the same program)
  1. Select ANT2 in the SET UP menu under Prog Chan.
  2. Tune the television to Channel 3 or 4, depending on your VCR.
  3. Using the VCR, tune to the television program you would like to record.
  4. Begin recording.
- Option B (Recording one program while viewing another program)
  1. Select ANT1 in the SET UP menu under Prog Chan.
  2. Press the TV/VIDEO button on the remote control to select the video input (VIDEO 1, VIDEO 2, etc.) connected to your VCR.
  3. Using the VCR, tune to the television program you would like to record.
  4. Begin recording.
  5. Press the TV/VIDEO button on the remote control to switch back to TV mode.
  6. Tune the television to the program you would like to view.

## VCR and Cable Box Connection

Follow this diagram when connecting your television to both a VCR and a cable box.




**Note:** The remote control must be programmed with supplied codes to operate the VCR and cable box (see page 64-66).

**Viewing a premium (scrambled) cable channel**

**Procedure**

1. Select ANT2 in the SET UP menu under Prog Chan (Program Channels).
2. Tune the television to Channel 3 or Channel 4.
3. Using the cable box, tune to the premium cable channel you would like to view.

**Note:** To use special features such as Favorite Channels and Channel Captions, ANT1 must be selected in the SET UP menu under Prog Chan (see page 23).

**Recording a premium (scrambled) cable channel**

**Procedure**

1. Select ANT2 in the SET UP menu under Prog Chan.
2. Press the TV/VIDEO button on the remote control to select the video input (VIDEO 1, VIDEO 2, etc.) connected to your VCR.
3. Turn the VCR ON.
4. Tune the VCR to Channel 3 or 4, depending on the switch setting on the back of VCR.
5. Using your cable box, tune to the premium cable channel you would like to record.
6. Begin recording.

**Note:** To view a different channel while recording:

- Select ANT1 in the SET UP menu under Prog Chan.
- Press the TV/VIDEO button on the remote control to TV mode.
- Tune the television to a program (except another premium cable channel).

**Notes:**

(1) Similar connections are available at the INPUT 1, 2, 3, 4 input terminals.
Input 4 is located on the front of the unit.
Select the desired VIDEO input position by pressing the TV/VIDEO button. (See page 17)

(2) When connecting video cables, priority is given to the S-Video cable when the S-Video input terminal and the video input terminal are connected at the same time.

# Location of Controls

## Illuminated Remote Control

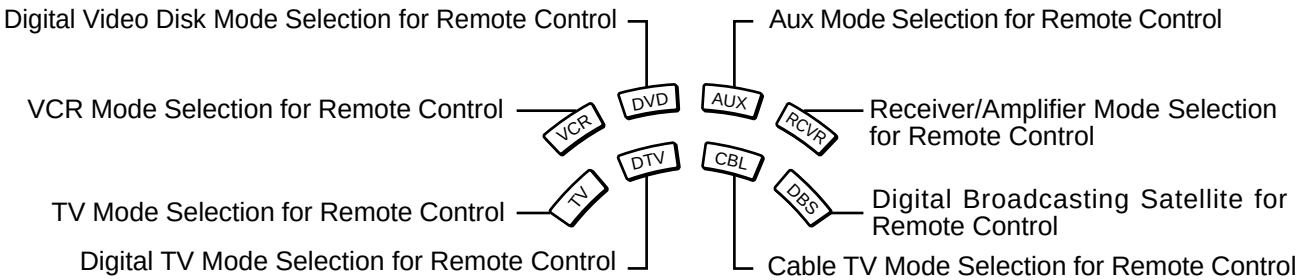
**Power button**
Press to turn the TV ON or OFF (See page 18).
**Note:** The TV's power cord must first be plugged into the wall outlet and then turned on at the POWER switch (standby mode).

**ASPECT button**
Change of screen size (See page 46).

→ 4 : 3 → ZOOM → FULL → JUST →

**MUTE button**
Press this button to mute the sound, press again to cancel the mute.

**Mode Selection buttons**
Selects the operation mode for the remote control. (See page 62)




R-TUNE **R-TUNE button**
Switches to previously viewed channel or video mode.

**Operation of other Device**

| Buttons / Device | PIP MIN REW / PIP MAX FF | PLAY | PAUSE | STOP |
|---|---|---|---|---|
| **TV** | PIP Minimize/Maximize | – | – | – |
| **VCR** | VCR REW/FF | PLAY | Pause | STOP |
| **CABLE/DBS** | – | – | – | – |
| **DVD/LD/CD** | Skip Search REW/FF | PLAY | Pause | STOP |
| **RCVR** | Surround –/+ | – | – | – |

| Buttons / Device | REC | FREEZE TV/VCR | PIP CH VCR CH | SEARCH OPEN/CLOSE |
|---|---|---|---|---|
| **TV** | – | PIP or SPLIT FREZE | PIP or SPLIT CH up/down | PIP Search |
| **VCR** | VCR RECORD | TV/VCR Switch | VCR CH up/down | – |
| **CABLE/DBS** | DBS RECORD | TV/DBS Switch | TV/DBS CH up/down | – |
| **DVD/LD/CD** | – | – | – | OPEN/CLOSE |
| **RCVR** | – | – | – | – |

**TV/VIDEO button**
The input mode changes each time this button is pressed.

TV → COMPONENT 1 → COMPONENT 2 → VIDEO 1 → VIDEO 2 → VIDEO 3 → VIDEO 4 → TV

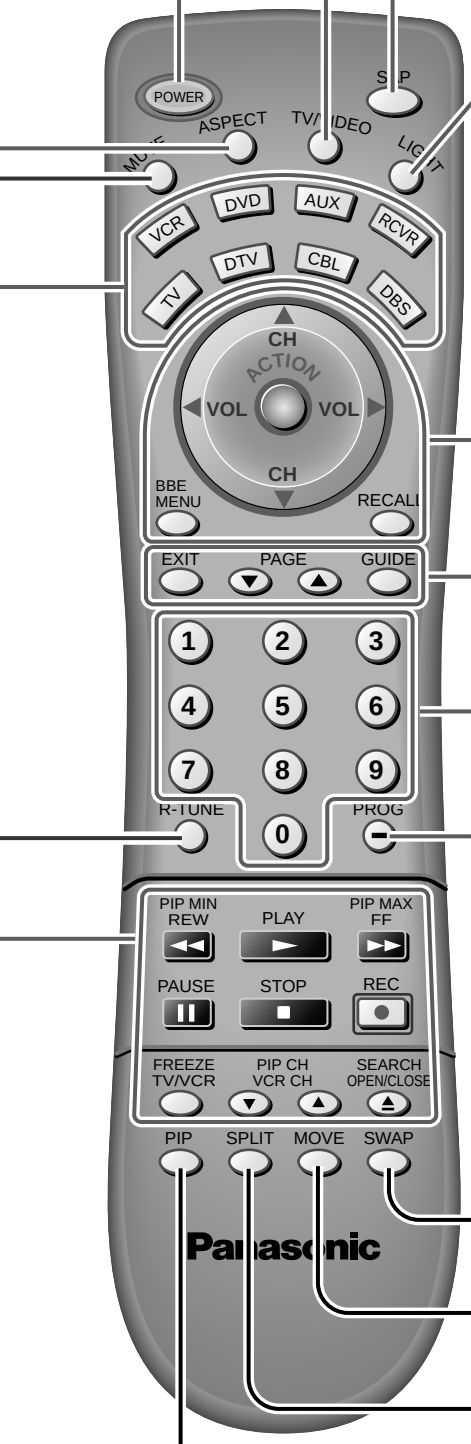
**SAP button**
Selects Audio mode (See page 38).

STEREO → SAP → MONO → STEREO

**Lights the remote control buttons.**
The selected button blinks when lit.

Turning the remote control illumination ON and OFF .

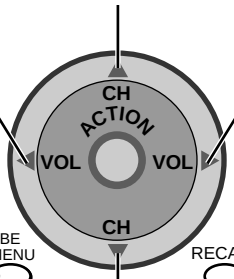
R-TUNE + RECALL
Remote control illumination can be turned ON and OFF by pressing the RECALL button while pressing the R-TUNE button.




**Changes to the next channel up**
Moves cursor upward during menu mode.

**Reduces volume**
Moves cursor to the left during menu mode.

**Increases volume**
Moves cursor to the right during menu mode.

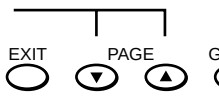



**Displays menu**
Press to access DTV, DBS or DVD menus.
During TV mode press to select BBE ON or BBE OFF.

Press to display time, channel, sleep timer and other options.

**Changes to the next channel down**
Moves cursor downward during menu mode.

Page up/down for DBS, skip +/- for DVD & CD.




GUIDE button for DBS.

Returns to normal viewing from the MENU screen.
Previous item in MENU.

**Direct program number selection buttons**

PROG
**PROG dash button**
Program dash channel numbers for DTV and DBS.

**Swap pictures in Split Screen and Picture in Picture operation** (See page 42, 45).

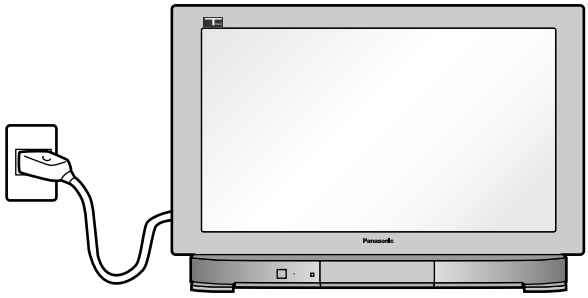
**Move PIP frame in Picture in Picture Operation** (See page 43)**.**

**Split Screen** (see page 44)

**Picture in Picture Operation** (see page 42)

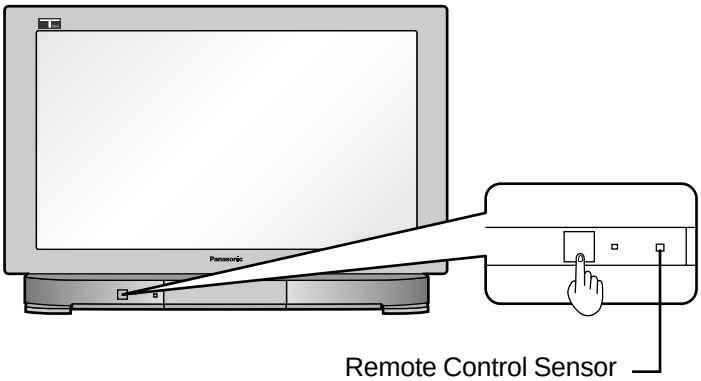
# Power ON / OFF

## Connecting the Plug to the Wall Outlet



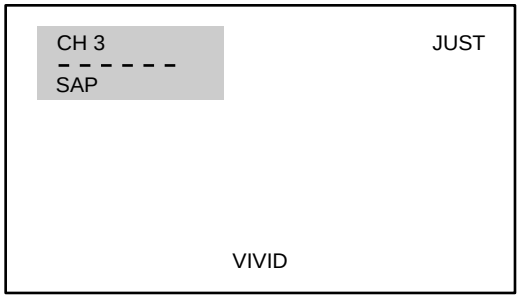
**Note:**
Main plug types vary between countries. The power plug shown at left may, therefore, not be the type fitted to your set.

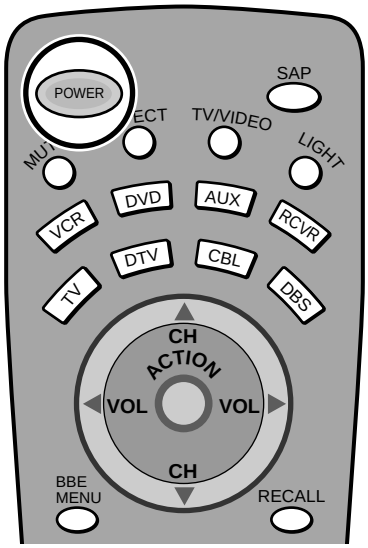
## How to Turn the Power On




Press the POWER switch on the TV to turn the set on.
POWER-ON: Red
When the set is on press the POWER switch on the TV to turn the set off.
STANDBY: No light

Example: The screen below is displayed for a while after the TV is turned on. (setting condition is an example.)



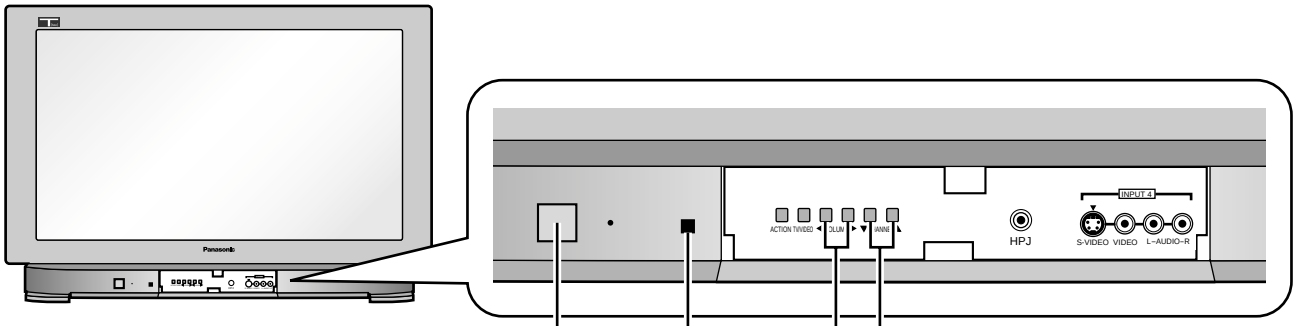
Press the POWER button on the remote control to turn the TV on: Red
Press the POWER button on the remote control to turn the TV off: No light (standby)

**Note:**
The TV will still consume some power as long as the power cord is still inserted into the wall outlet.

## Menu Language Selection

In SET UP Menu, Select IDIOMA/LANGUE to change menu language to ENGLISH, ESPAÑOL (Spanish) or FRANÇAIS (French). (refer to page 22)

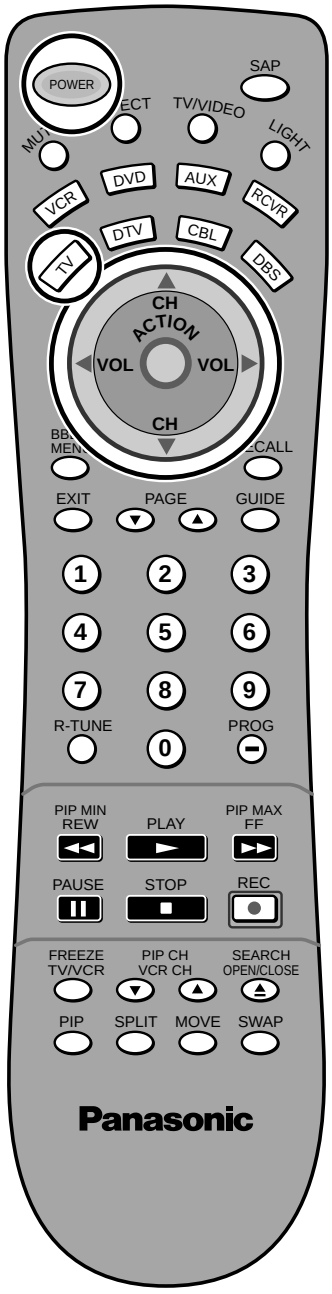
# VHF, UHF and CATV




Power switch

Operation can be done from the TV set.
- Channel selectors
- Volume adjusters

Remote control sensor



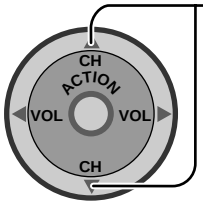

**1**


Press

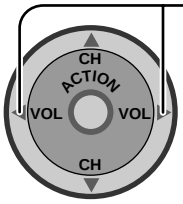
to operate the TV set with the remote control.

**2**


Press to turn the TV on (See page 18).

**3** 


Press to select the desired channel.

**4** 


Select the desired volume level.

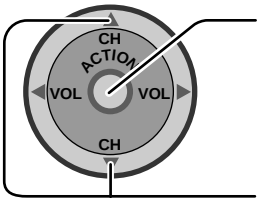
**Notes:**

(1) The channel number and volume level remain the same even after the TV is turned off.

(2) Power consumption and howling of sound can be reduced if the volume level is lowered.

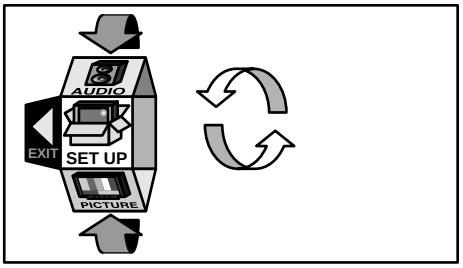
# Roller Guide Menu Navigation

**1**

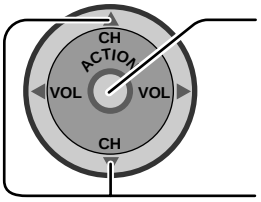



Press to display the roller guide menu.

Press to rotate to desired icon.

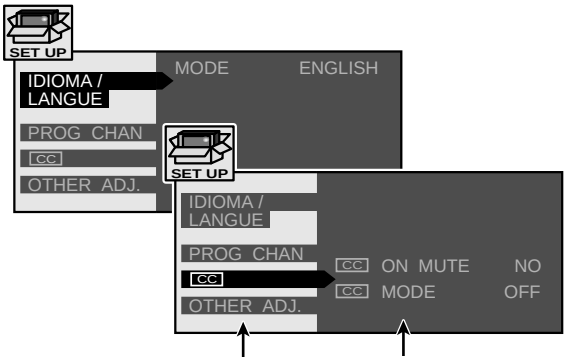



**2**



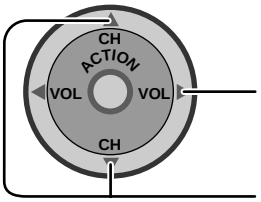

Press to display the main menu and submenu field.

Press to select main menu feature.



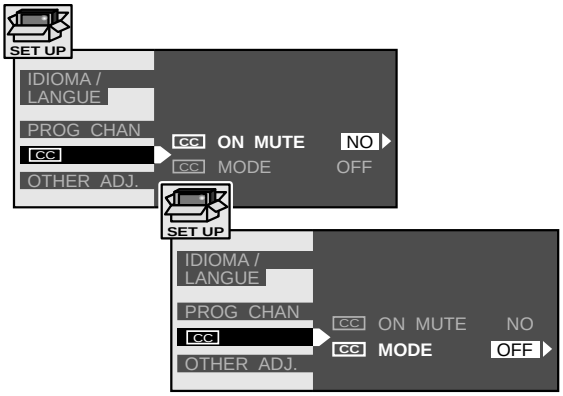

Main menu field Submenu field

**3**

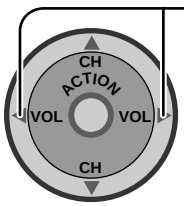



Press to enter submenu field.

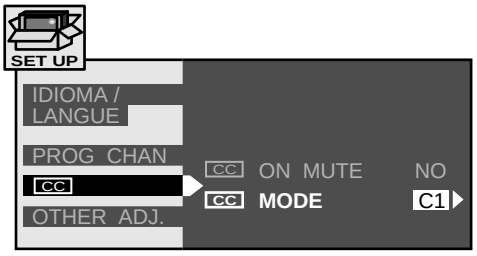
Press to select desired submenu feature.



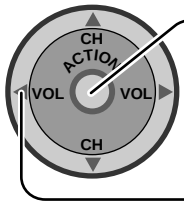

**4**




Press to select or adjust.

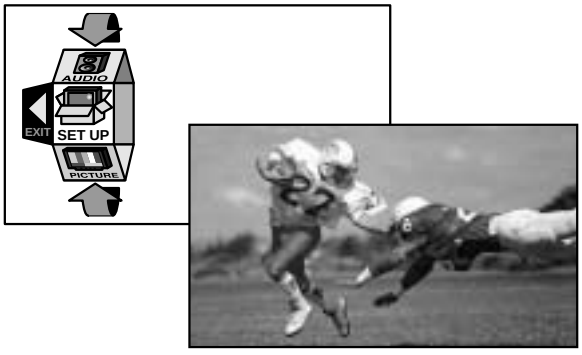



**5**

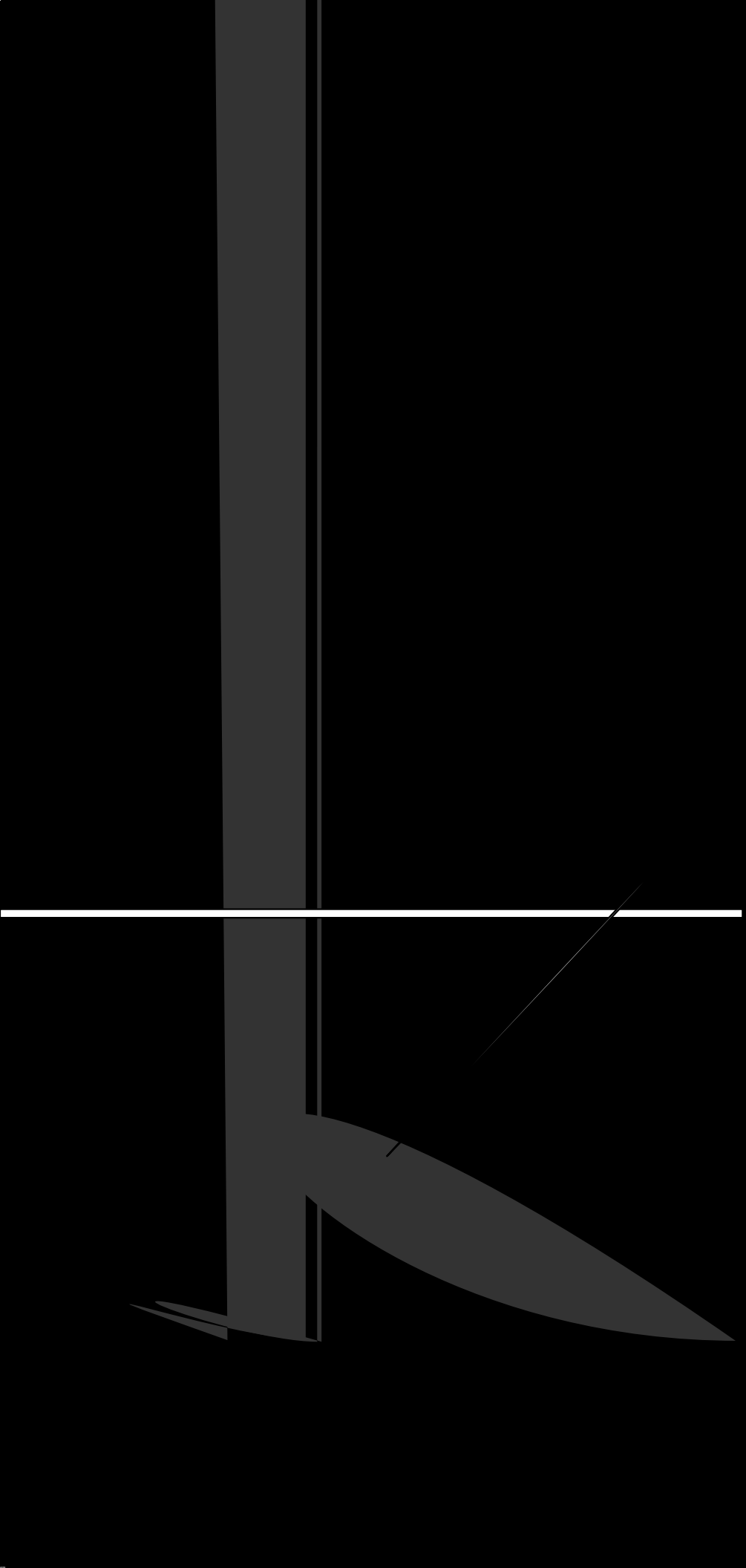



Press twice to return to the roller guide.

Press to exit roller guide.
This returns the set to the normal viewing.



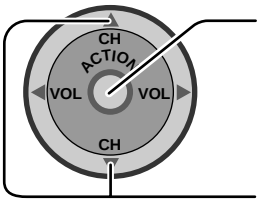

NORMAL PICTURE



# SET UP Operation

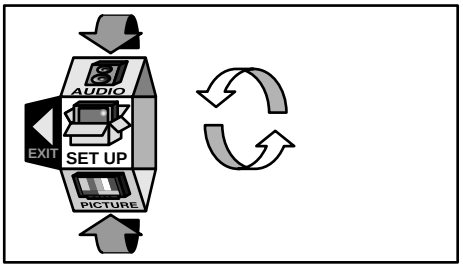
## SET UP

**1**

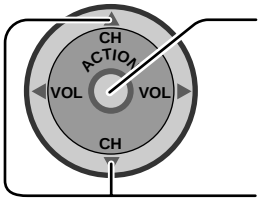



Press to display the roller guide menu.

Press to rotate to SET UP.




**2**

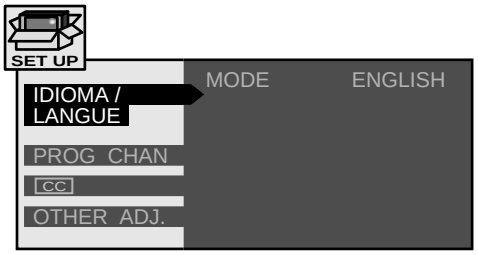



Press to display SET UP.

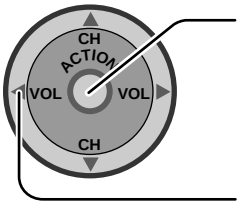
Press to select the main menu.

⇩

Proceed to each adjustment item of the selected main menu.

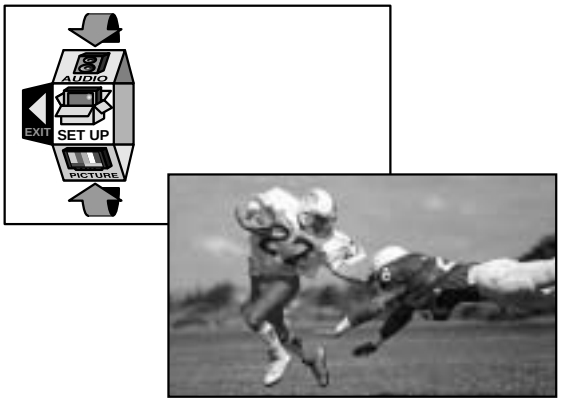



**3 To end Adjustment:**




Press twice to return to the roller guide.

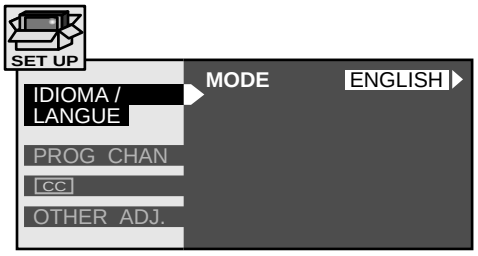
Press to exit roller guide.
This returns the set to normal viewing.



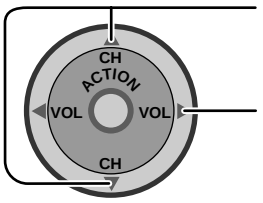

NORMAL PICTURE

## MENU Languages

In SET UP Menu, select IDIOMA / LANGUE to change menu language to ENGLISH, ESPAÑOL (Spanish) or FRANÇAIS (French).



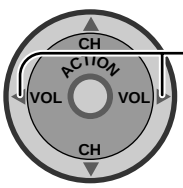

**1**




Press to select IDIOMA / LANGUE.

Press to enter submenu field.

**2**



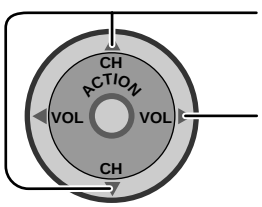

Press to select ENGLISH, SPANISH or FRENCH.

ENGLISH ⟷ ESPAÑOL ⟷ FRANÇAIS

## MODE Selection

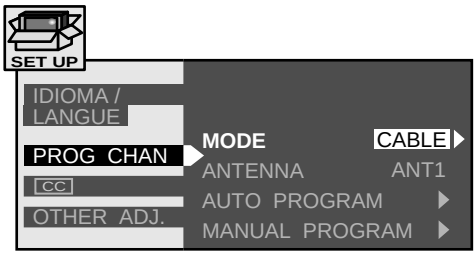
To select either CABLE or TV.

**1**

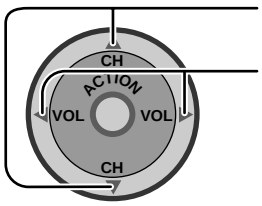



In SET UP menu press to select PROG CHAN.

Press to enter submenu field.




**2**




Press to select MODE.

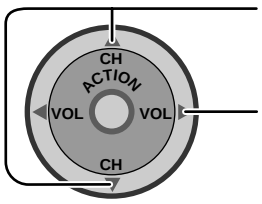
Press to select CABLE or TV.

CABLE ⟷ TV

## ANTENNA Selection

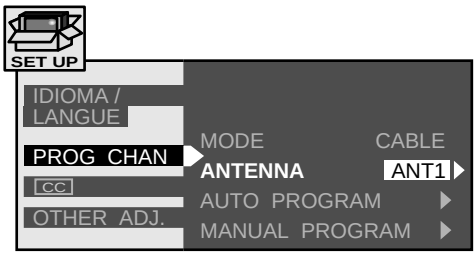
To select either ANT1 or ANT2.

**1**

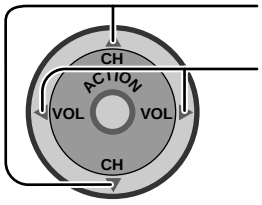



In SET UP menu press to select PROG CHAN.

Press to enter submenu field.




**2**




Press to select ANTENNA.

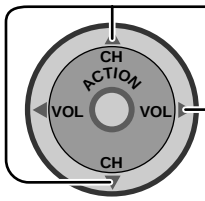
Press to select ANT1 or ANT2.

ANT1 ⟷ ANT2

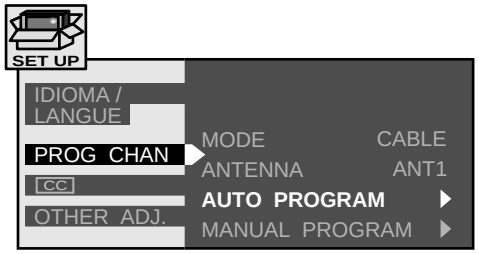
# AUTO PROGRAM

To automatically program all channels with a signal.

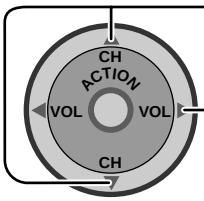
**1** In SET UP menu press to select PROG CHAN.




Press to enter submenu field.




**2** Press to select AUTO PROGRAM.

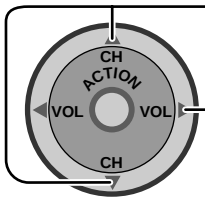



Press to start AUTO PROGRAM.

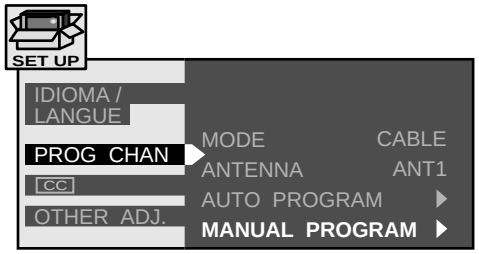
# MANUAL PROGRAM

To manually add or delete channels.

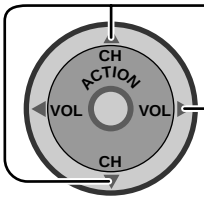
**1** In SET UP menu press to select PROG CHAN.




Press to enter submenu field.

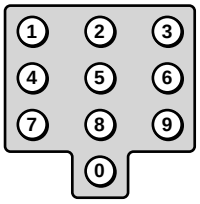



**2** Press to select MANUAL PROGRAM.

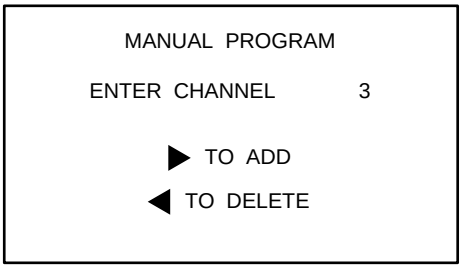



Press to display next menu.

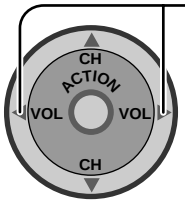
**3**




Use remote numeric keypad to select desired channel.



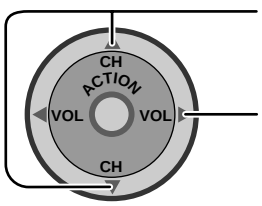

**4** Press to ADD or DELETE the channel.



# AUTO POWER

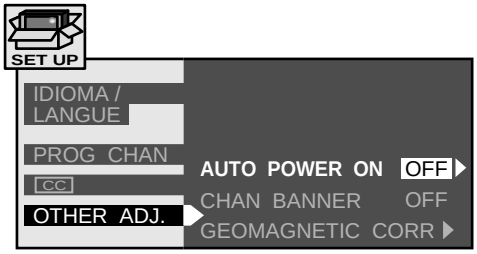
Select SET to power up the TV at the same time as the cable box or other components or select OFF.

**1**

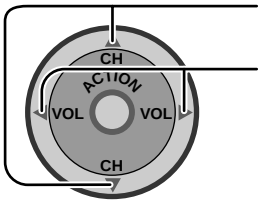



In SET UP menu press to select OTHER ADJ.

Press to enter submenu field.




**2**




Press to select AUTO POWER.

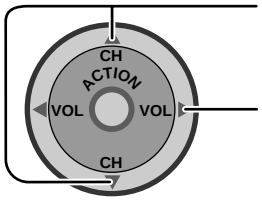
Press to select SET or OFF.

SET ⟷ OFF

# CHAN BANNER

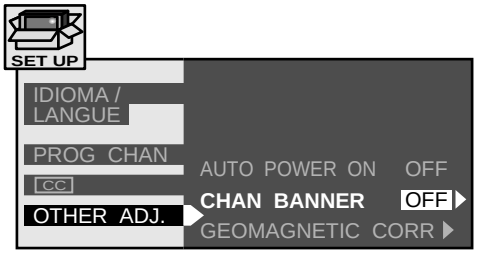
Select ON to display the CHANNEL BANNER on the screen or select OFF.

**1**

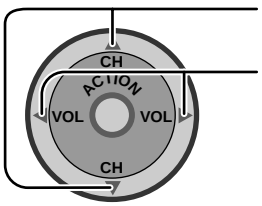



In SET UP menu press to select OTHER ADJ.

Press to enter submenu field.




**2**




Press to select CHAN BANNER.

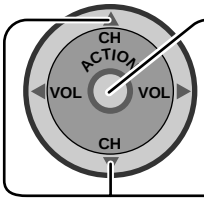
Press to select ON or OFF.

ON ⟷ OFF

# Closed Captions

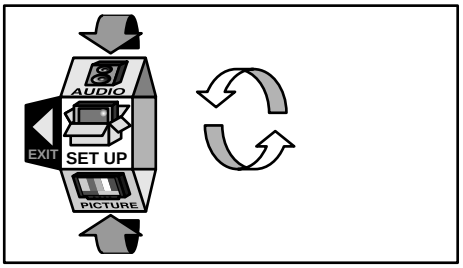
This receiver has a built in decoder that provides a visual depiction of the audio portion of a television program in the form of written words across the screen (white or colored letters on a black background). It allows the viewer to read the dialogue of a television program or other information.

**1**

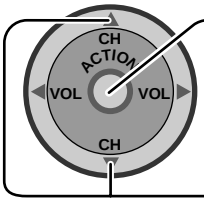



Press to display the roller guide menu.

Press to rotate to SET UP.

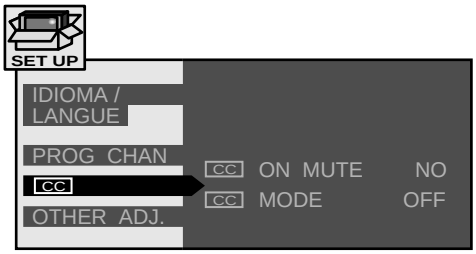



**2**

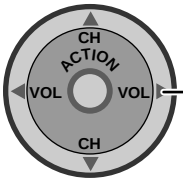



Press to display SET UP.

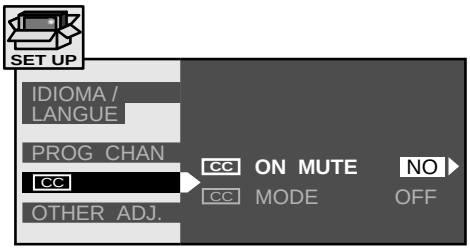
Press to select CC.




**3**




Press to enter submenu field.

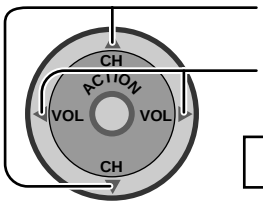



---

### CC ON MUTE

Activates the On-Screen Closed Caption feature, when the MUTE button on the Remote Control is pressed. To deactivate, press the MUTE button again.

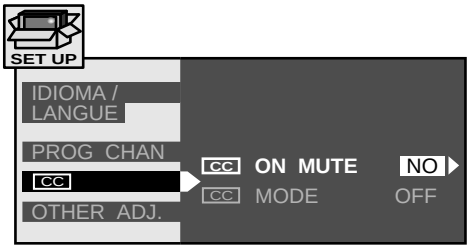
**Note:**
This feature functions when the Closed Caption Mode is in the “OFF” position. The program being viewed must be broadcast with Closed Caption.




In the submenu field press to select CC ON MUTE.

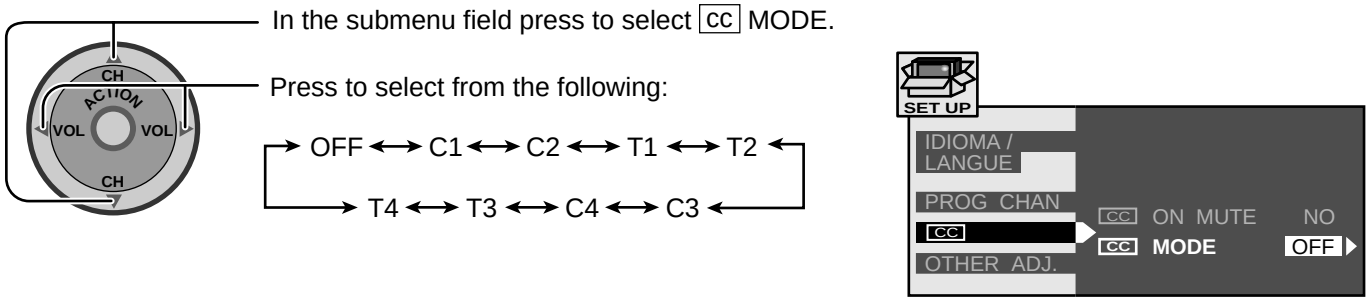
Press to select from the following:

NO (OFF) ↔ C1 ↔ C2 ↔ C3 ↔ C4



## CC MODE

Activates the On-Screen Closed Caption feature. When activated this feature will remain on until OFF is selected in this menu.




- **CAPTION OFF -** Recommended mode when Closed Caption is not being used.
- **CAPTION C1 -** For video related information that can be displayed (up to 4 lines of script strategically placed on the television screen so that it does not obstruct relevant parts of the picture).
- **CAPTION C2 -** Another mode used for video related information.
- **TEXT T1 -** Blanks out a large portion of the picture on the television screen, and displays program guide or any other information currently being transmitted.
- **TEXT T2 -** Another mode which displays information and blanks out a large portion of the picture on the television screen.
- **CAPTION C3 -** Another mode used for video related information.
- **CAPTION C4 -** Another mode used for video related information.
- **TEXT T3 -** Another mode which displays information and blanks out a large portion of the picture on the television screen.
- **TEXT T4 -** Another mode which displays information and blanks out a large portion of the picture on the television screen.

---

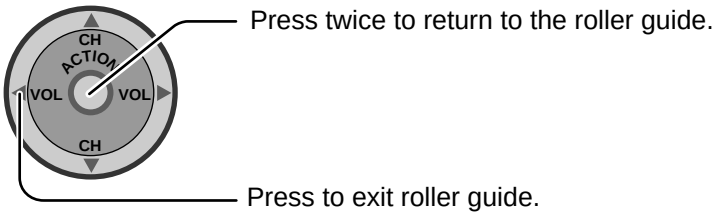
**Notes:**

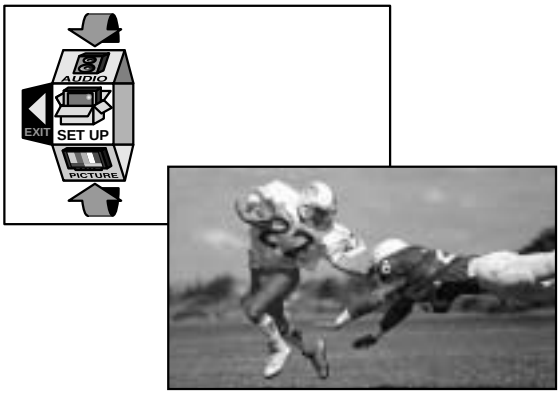
(1) Recommended menu Set Up for Closed Caption when using Mute Button.
CC ON MUTE: C1
CC MODE: OFF

(2) The setting for CC ON MUTE is valid only when the CC MODE is OFF. CC MODE set to ON will override CC ON MUTE. This menu cannot be selected when the MAIN picture is displaying a COMPONENT VIDEO INPUT of 480i or more.

(3) When aspect is ZOOM, Closed Caption cannot be used.

## 4 To end Adjustment:



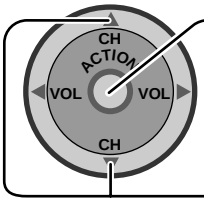




NORMAL PICTURE

# Geomagnetic correction (Adjusting skewing of images)

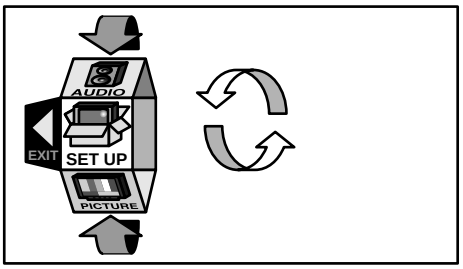
GEOMAGNETIC CORR (CORRECTION) adjusts to erase the discoloration of the picture due to earth's magnetic field in the area.
This correction is made when moving the TV set or when image is slightly skewed.

**1**

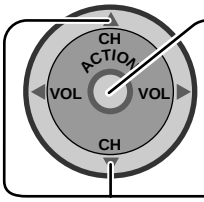



Press to display the roller guide menu.

Press to rotate to SET UP.

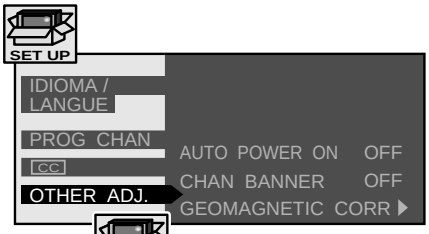



**2**

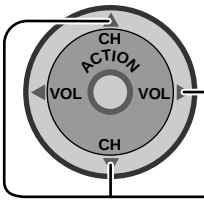



Press to display SET UP.

Press to select OTHER ADJ.

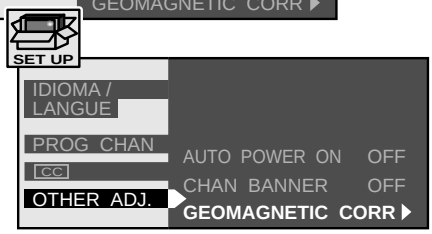



**3**

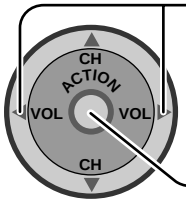



Press to enter submenu field.

Press to select GEOMAGNETIC CORR.

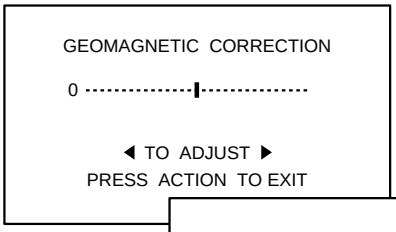


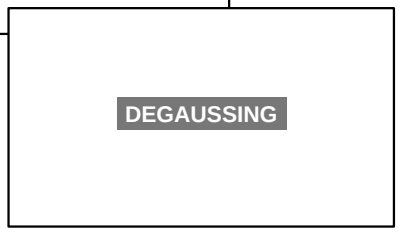

**4**



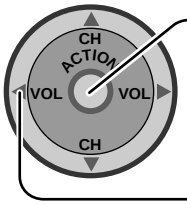

Adjust the vertical bar left or right until the discoloration disappears.

Press to exit GEOMAGNETIC CORRECTION.
"DEGAUSSING" will be displayed for three seconds.



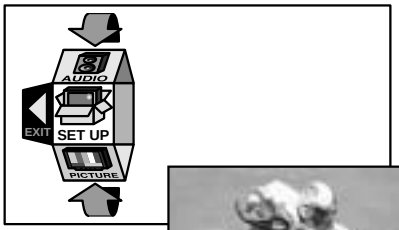




**5 To end Adjustment:**




Press twice to return to the roller guide.

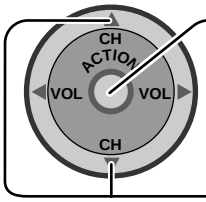
Press to exit roller guide.
This returns the set to normal viewing.



NORMAL PICTURE

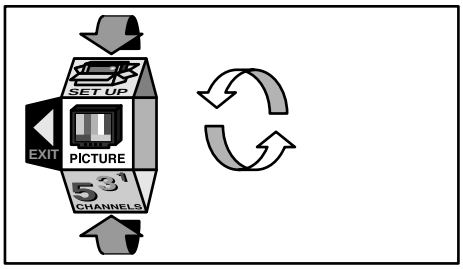
# PICTURE Adjustment

**1**

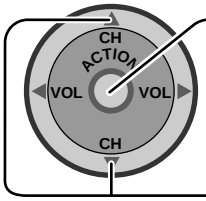



Press to display the roller guide menu.

Press to rotate to PICTURE.

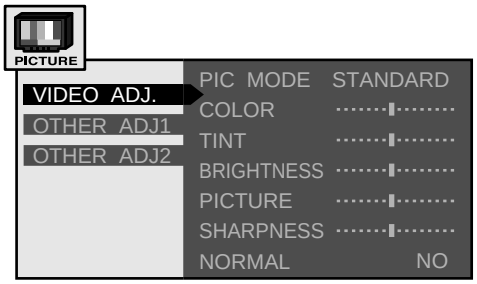



**2**




Press to display PICTURE menu.

Press to select the main menu.

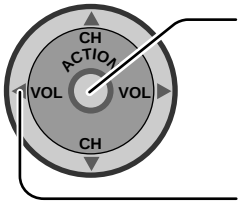



→ VIDEO ADJ. ⟷ OTHER ADJ1. ⟷ OTHER ADJ2. ←

⇩

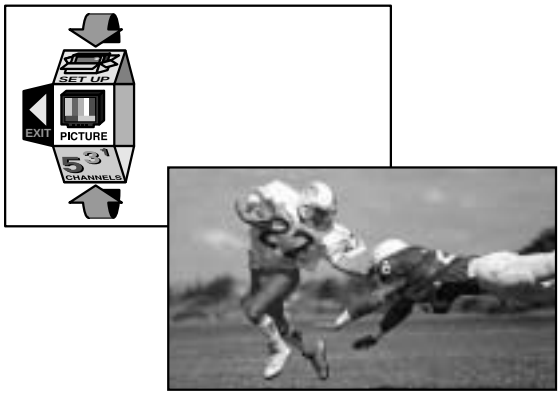
Proceed to each adjustment item of the selected main menu.

**3 To end Adjustment:**




Press twice to return to the roller guide.

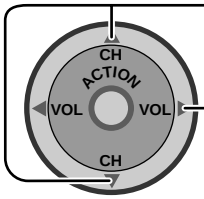
Press to exit roller guide.
This returns the set to normal viewing.




NORMAL PICTURE

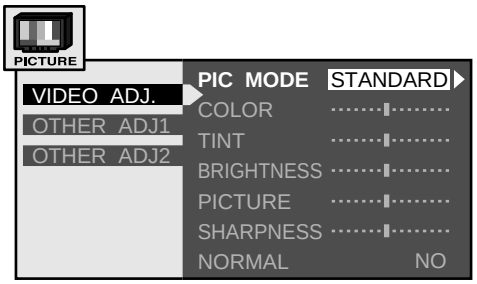
## PICTURE MODE

**1**

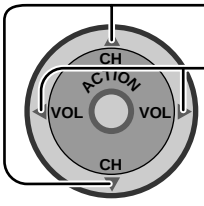



In PICTURE menu press to select VIDEO ADJ..

Press to enter submenu field.




**2**



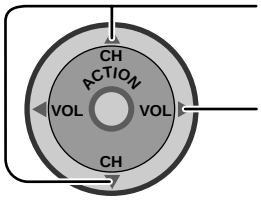

In VIDEO ADJ. submenu field press to select PIC MODE.

Press to select your desired PICTURE MODE.

→ VIVID ⟷ STANDARD ⟷ CINEMA ←

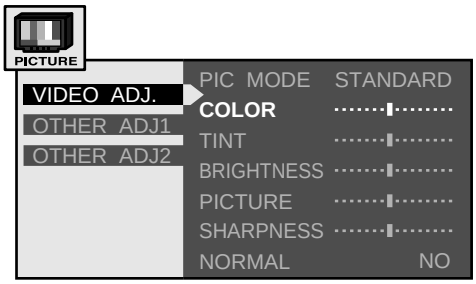
# COLOR / TINT / BRIGHTNESS / PICTURE / SHARPNESS / NORMAL

**1**

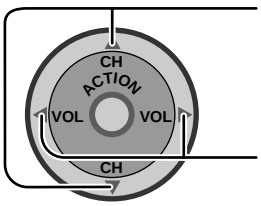



In PICTURE menu press to select VIDEO ADJ..

Press to enter submenu field.




**2**



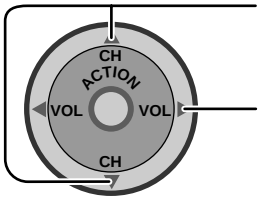

In VIDEO ADJ. submenu field press to select each submenu (COLOR / TINT / BRIGHTNESS / PICTURE / SHARPNESS / NORMAL).

Press to adjust the desired level by looking at the picture behind the menu.

| Item | Function |
|---|---|
| **COLOR** | Adjusts desired color intensity. |
| **TINT** | Adjusts natural flesh tones. |
| **BRIGHTNESS** | Adjusts dark areas of picture. |
| **PICTURE** | Adjusts white areas of picture. |
| **SHARPNESS** | Adjusts clarity of outline detail. |
| **NORMAL** | Resets all picture adjustments to factory default settings. |

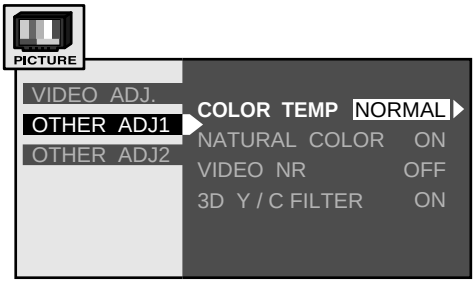
# COLOR TEMP (Temperature) / NATURAL COLOR / VIDEO / NR / 3D Y/C FILTER

**1**

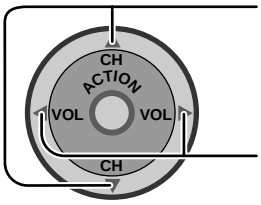



In PICTURE menu press to select OTHER ADJ1.

Press to enter submenu field.



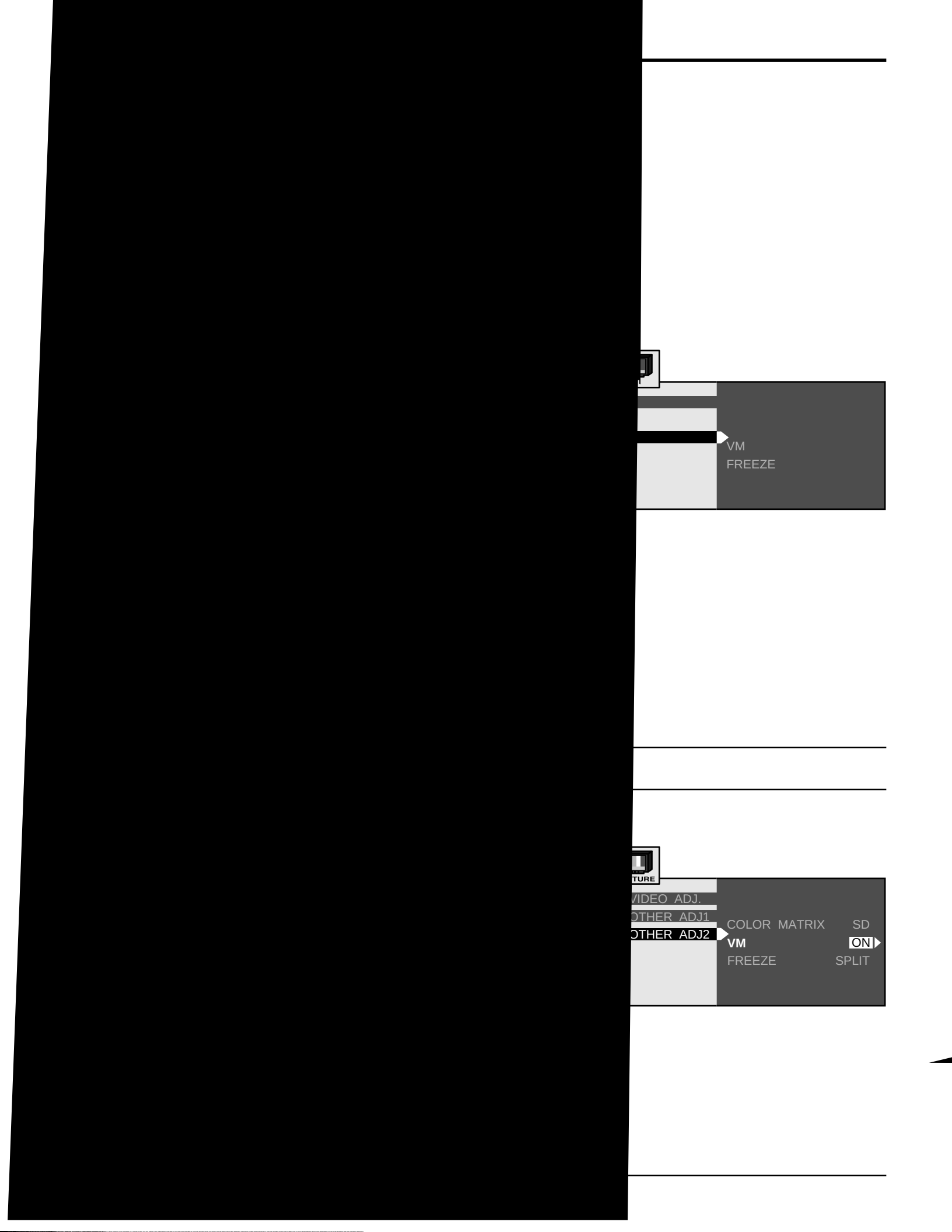

**2**




In OTHER ADJ1 submenu field press to select each submenu (COLOR TEMP / NATURAL COLOR / VIDEO NR / 3D Y/C FILTER).

Press to adjust the desired level by looking at the picture behind the menu.

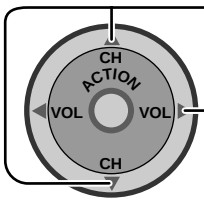
| Item | Mode | Explanations |
|---|---|---|
| **COLOR TEMP (temperature)** | NORMAL ⟷ WARM ⟷ COOL | To increase or decrease WARM (red) and COOL (blue) colors to suit personal preferences. |
| **NATURAL COLOR** | ON ⟷ OFF | To increase the color reproduction range with natural color gradation and highly delicate hues. |
| **VIDEO NR** | ON ⟷ OFF | Reduces noise in the channel,commonly called snow. Remains off when receiving a strong signal. |
| **3D Y/C FILTER** | ON ⟷ OFF | Minimizes noise and cross color in the picture. |


VM
FREEZE
VIDEO ADJ.
OTHER ADJ1
OTHER ADJ2
COLOR MATRIX SD
VM ON
FREEZE SPLIT

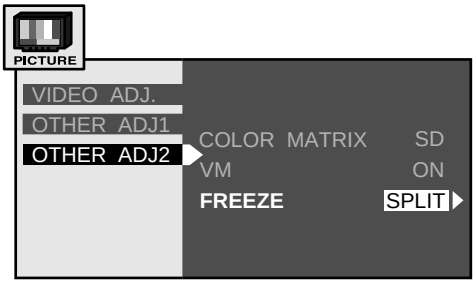
# FREEZE

Select SPLIT or PIP to determine the frozen picture frame during single screen.

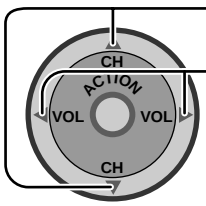
**1** In PICTURE menu press to select OTHER ADJ2.




Press to enter submenu field.



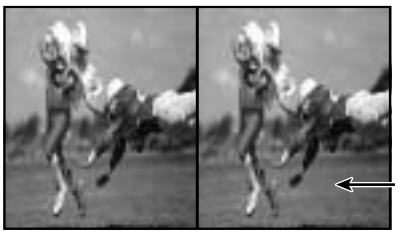

**2** In OTHER ADJ2 submenu field press to select FREEZE.




Press to select SPLIT or PIP.

SPLIT ⟷ PIP

**3** FREEZE TV/VCR When the screen is single press FREEZE TV/VCR to freeze the screen.




When FREEZE SPLIT is selected.

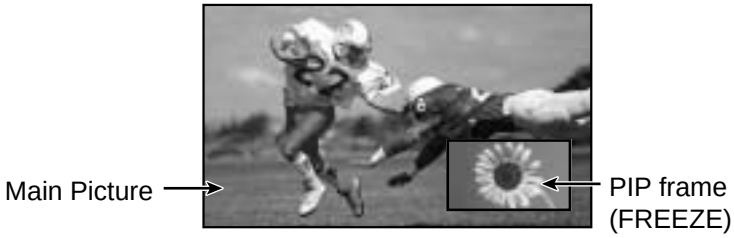
When FREEZE PIP is selected.

**4** FREEZE TV/VCR Press FREEZE TV/VCR again to recover.

**Notes:**

(1) When FREEZE TV/VCR is pressed during Split Screen, the Split Screen will be frozen and the main picture continues action (see page 44).

(2) When FREEZE TV/VCR is pressed during PIP Operation, the PIP frame will be frozen and the main picture continues action (see page 43).

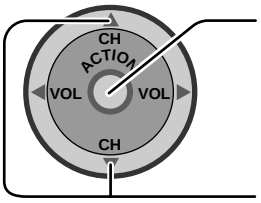


# CHANNEL SCAN

**CHANNEL SCAN** Let you select the channel scanning mode either FAV or ALL.

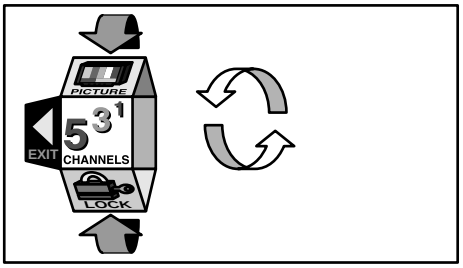
CHANNEL SCAN FAV To enter up to 16 favorite channels.
CHANNEL SCAN ALL To scan all channels when using the CH up/down buttons.

**1**

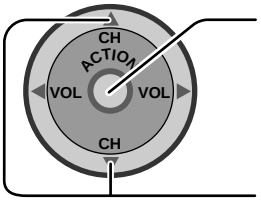



Press to display the roller guide menu.

Press to rotate to CHANNELS.

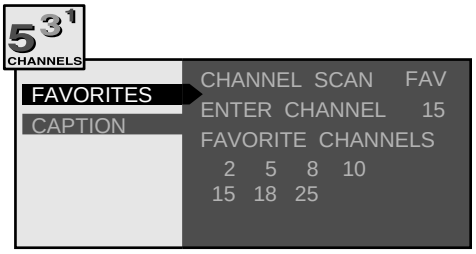



**2**

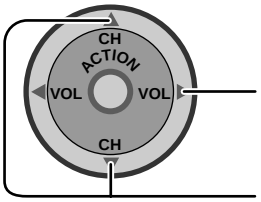



Press to display CHANNELS.

Press to select FAVORITES.

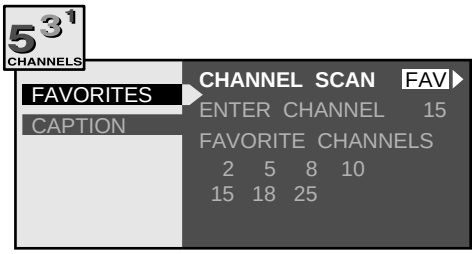



**3**

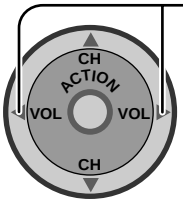



Press to enter submenu field.

Press to select CHANNEL SCAN.

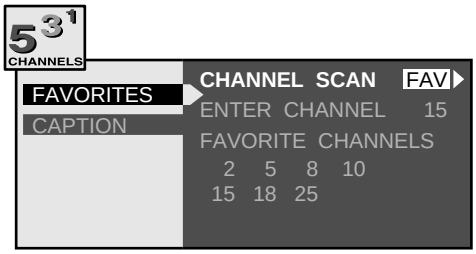


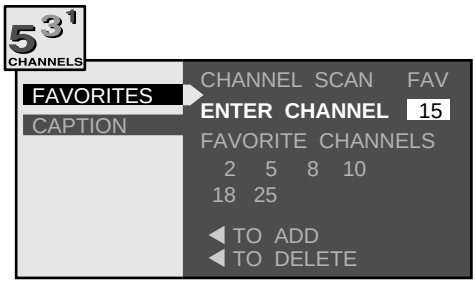

**4**

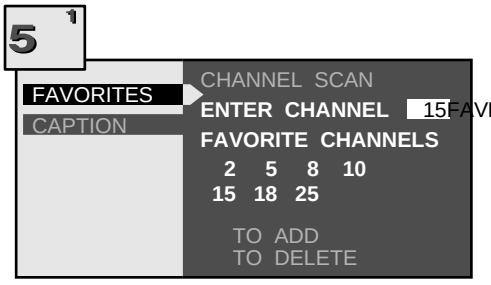



Press to select FAV or ALL.

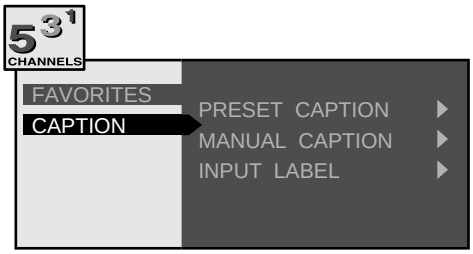
FAV ⟷ ALL

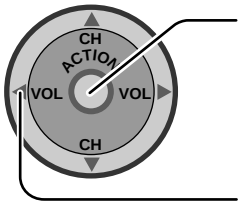

5 3 1
CHANNELS
FAVORITES
CAPTION
CHANNEL SCAN FAV
ENTER CHANNEL 15
FAVORITE CHANNELS
2 5 8 10
15 18 25

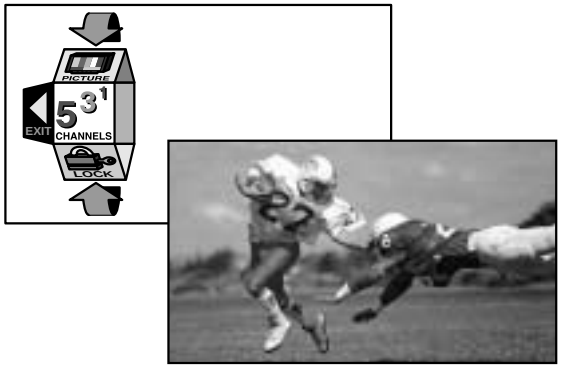

5 3 1
CHANNELS
FAVORITES
CAPTION
CHANNEL SCAN FAV
ENTER CHANNEL 15
FAVORITE CHANNELS
2 5 8 10
18 25
◀ TO ADD
◀ TO DELETE

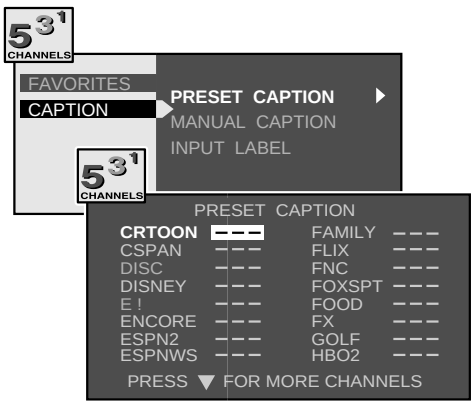

5 1
FAVORITES
CAPTION
CHANNEL SCAN
ENTER CHANNEL 15
FAVORITE CHANNELS
2 5 8 10
15 18 25
TO ADD
TO DELETE

FAVFAVORIT


CHANNELS
FAVORITES
CAPTION
PRESET CAPTION
MANUAL CAPTION
INPUT LABEL


CH
ACTION
VOL
VOL
CH

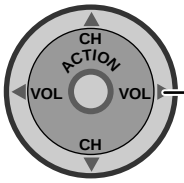

PICTURE
EXIT
CHANNELS
LOCK


CHANNELS
FAVORITES
CAPTION
PRESET CAPTION
MANUAL CAPTION
INPUT LABEL
CHANNELS
PRESET CAPTION
CRTOON
CSPAN
DISC
DISNEY
E !
ENCORE
ESPN2
ESPNWS
FAMILY
FLIX
FNC
FOXSPT
FOOD
FX
GOLF
HBO2
PRESS ▼ FOR MORE CHANNELS

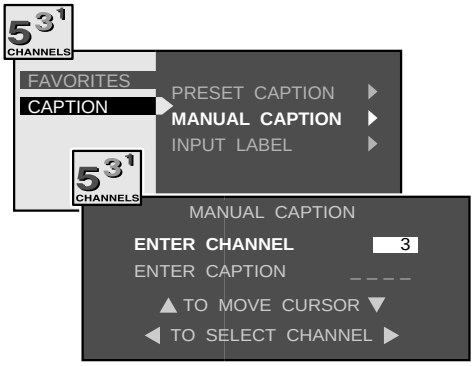
## MANUAL CAPTION

Enter channel numbers and captions manually.

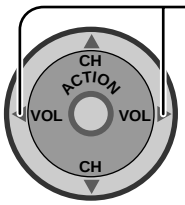
**1**




Under MANUAL CAPTION press to display next menu.

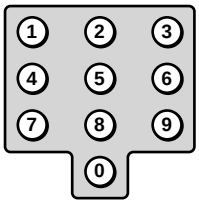



**2**



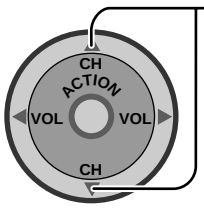

Press to enter desired channel.

**OR**

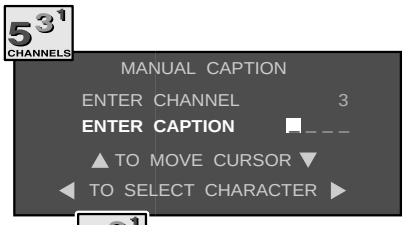



Use remote numeric keypad to select desired channel (refer to your local TV guide).

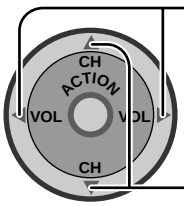
**3**



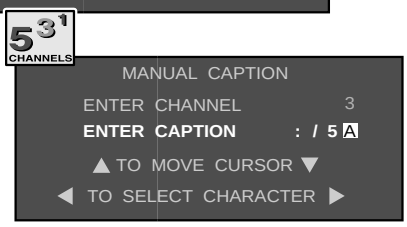

Press to select ENTER CAPTION.




**4**




Press to select characters.



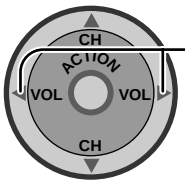

Press to move cursor.
Repeat Step 4 up to 4 characters.

**Note:**
In MANUAL CAPTION up to 4 characters can be selected as a CAPTION.

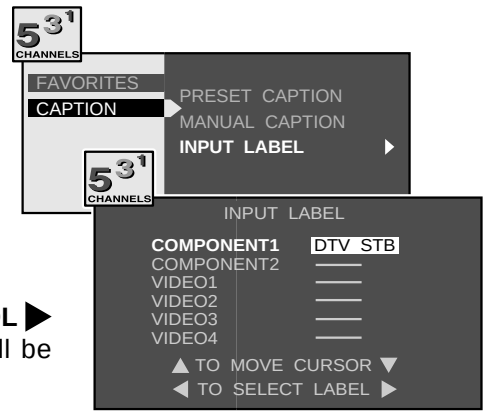
## INPUT LABEL

Label video input connections to display optional equipment.

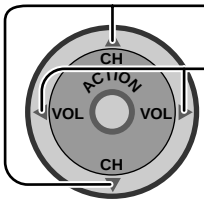
**1**




Under INPUT LABEL press to display next menu.




**2**



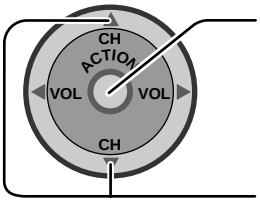

Press to move cursor.

Press to select desired LABEL.

**Note:**
To delete, select LABEL, then press ◀ **VOL** or **VOL** ▶ to select ''**SKIP**''. The selected INPUT mode will be skipped when TV/VIDEO button is pressed.

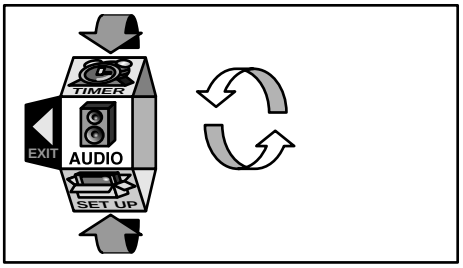
# Selecting STEREO/SAP/MONO

**1**

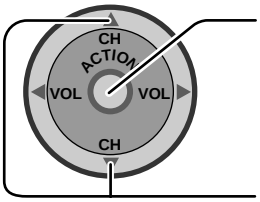



Press to display the roller guide menu.

Press to rotate to AUDIO.

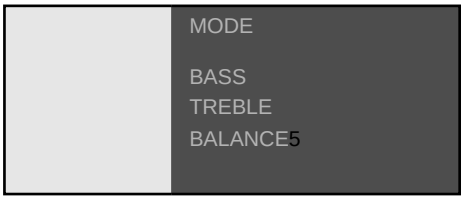



**2**




Press to display AUDIO.

Press to select AUDIO ADJ..

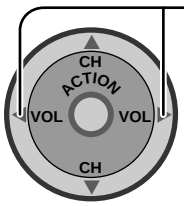



**3**

Press to enter submenu field.

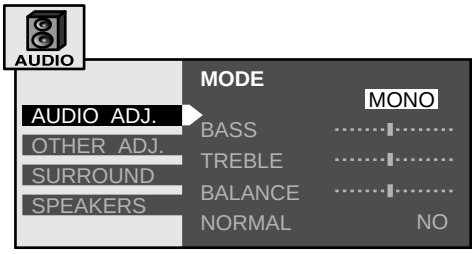
Press to select MODE.

**4**

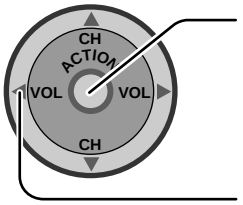



Press to select STEREO / SAP / MONO.

Red display - Signal available
White display - Signal not available

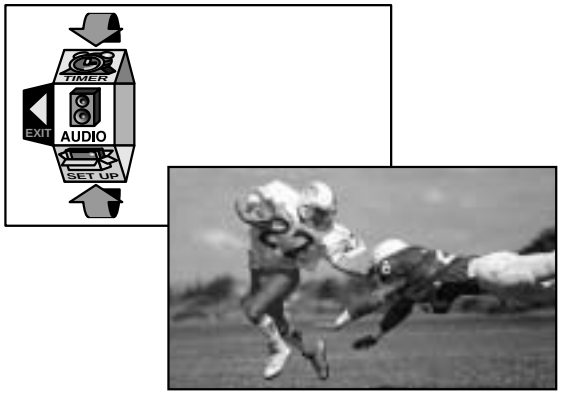



**5 To end Adjustment:**




Press twice to return to roller guide.

Press to exit roller guide.
This returns the set to normal viewing.



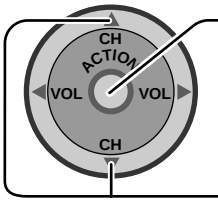

NORMAL PICTURE

***Helpful Hints:***

- **STEREO -** Two channel Audio reception.
- **SAP -** Second Audio Programming (typically used for bilingual audio).
- **MONO -** Use when stereo signal is weak.

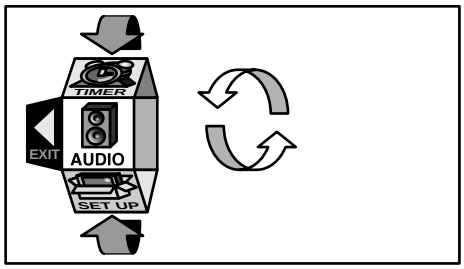
# Audio Adjustment

**1**

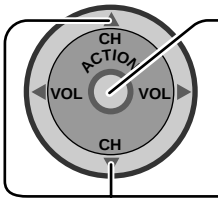



Press to display the roller guide menu.

Press to rotate to AUDIO.




**2**




Press to display AUDIO menu.

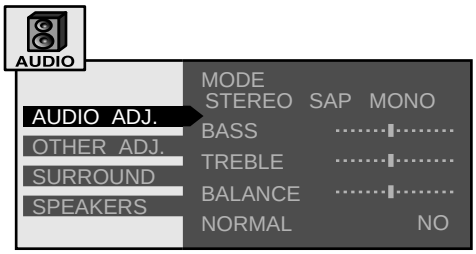
Press to select the main menu.

AUDIO ADJ. ⟷ OTHER ADJ.

SPEAKERS ⟷ SURROUND

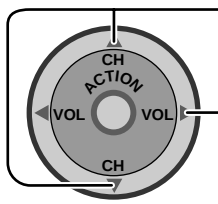
⇩

Proceed to each adjustment item of the selected main menu.



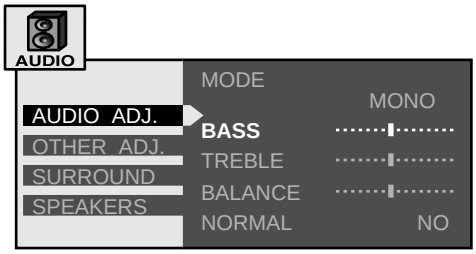

## Selecting BASS / TREBLE / BALANCE / NORMAL

**1**

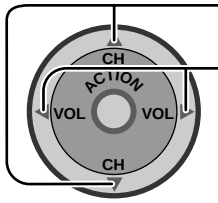



In AUDIO menu press to select AUDIO ADJ..

Press to enter submenu field.




**2**




Press to select BASS / TREBLE / BALANCE / NORMAL.

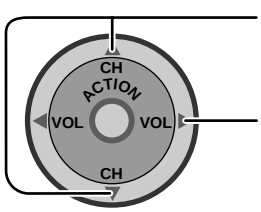
Press to adjust the desired level by listening to the sound.

| Item | Effect | Function |
|---|---|---|
| **BASS** | ◀ Less ▶ More | Increase or decrease the bass response. |
| **TREBLE** | ◀ Less ▶ More | Increase or decrease the treble response. |
| **BALANCE** | ◀ Left SP. ▶ Right SP. | Emphasize the left / right speaker volume. |
| **NORMAL** | ▶ NO | Reset BASS, TREBLE and BALANCE adjustments to factory default settings. |

# AI SOUND / BBE

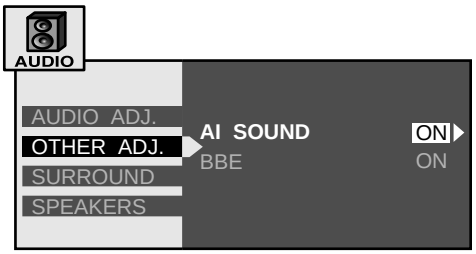
**AI SOUND** Equalize overall volume levels across all channels.(AI sound is not available in VIDEO mode).
**BBE** Use special signal processing to accurately reproduce the "attack" of each sound, in order to make it immediate and superbly faithful to the original, while retaining its natural feel.

**1**

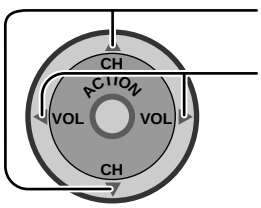



In AUDIO menu press to select OTHER ADJ..

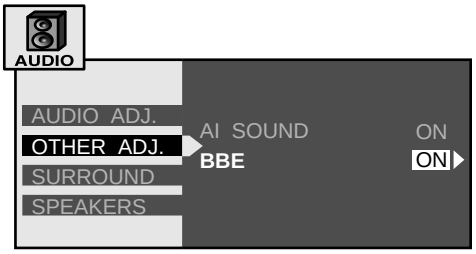
Press to enter submenu field.




**2**




Press to select AI SOUND or BBE.
AI SOUND ⟷ BBE
Press to select ON or OFF.
ON ⟷ OFF

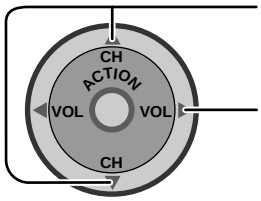



**Note:**
All SOUND is not available in VIDEO mode.

# SURROUND

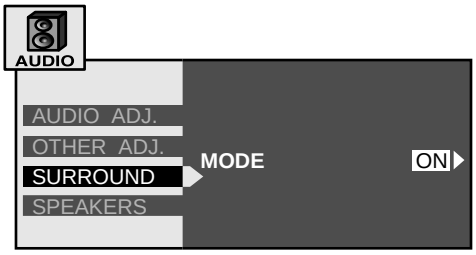
To enjoy a concert hall effect, turn the SURROUND to ON.

**1**

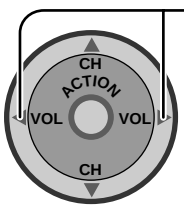



In AUDIO menu press to select SURROUND.

Press to enter submenu field (MODE).




**2**




Press to select ON or OFF.

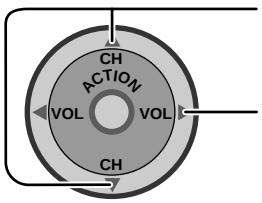
ON ⟷ OFF

**Notes:**
During stereo sound or soft playing : SURROUND ⟶ set to ON.
During normal sound : SURROUND ⟶ set to OFF.

# SPEAKERS

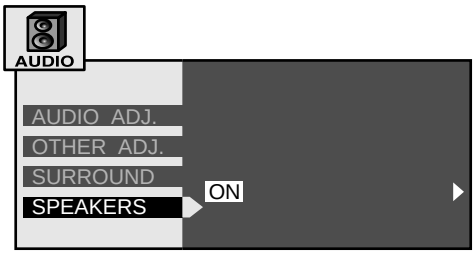
In AUDIO menu under SPEAKERS, select the desired SPEAKER mode.

**1**

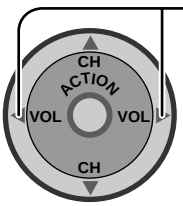



In AUDIO menu press to select SPEAKERS.

Press to enter submenu field.




**2**



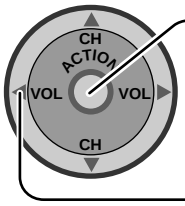

Press to select your desired mode.

ON ⟷ OFF & VARIABLE AUDIO OUT

OFF & FIXED AUDIO OUT

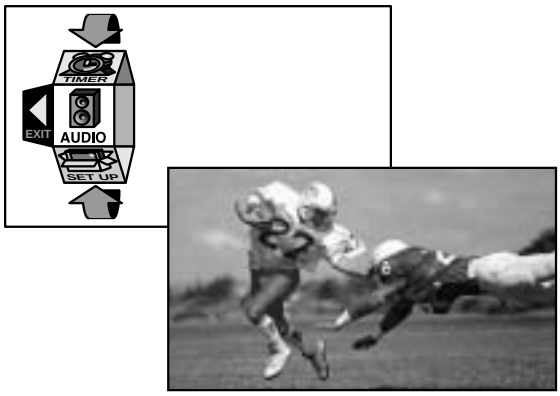
| Mode | Function |
|---|---|
| **ON** | TV speakers operate normally. |
| **OFF & Variable Audio Out** | TV speakers off -audio adjustable by television. |
| **OFF & Fixed Audio Out** | TV speakers off -audio adjustable by the external amplifier only. |

### To end Adjustment:




Press twice to return to the roller guide.

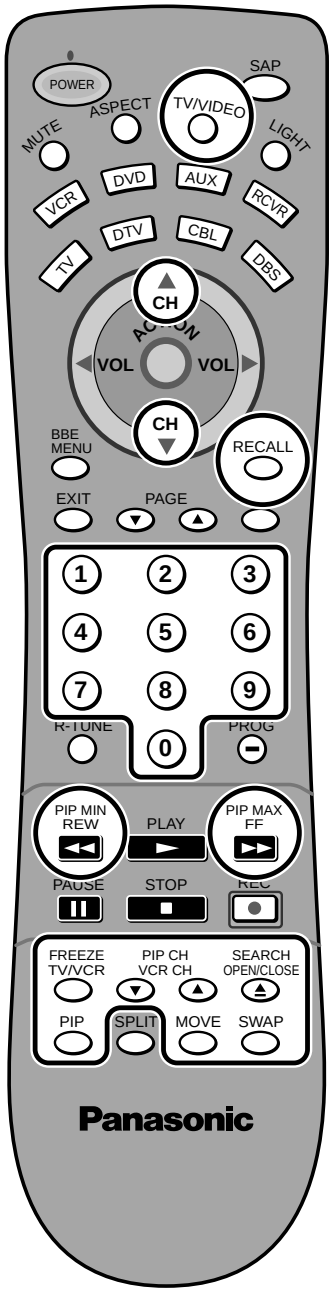
Press to exit roller guide.
This returns the set to normal viewing.




NORMAL PICTURE

# Picture in Picture Operation

This television includes a two-tuner Picture In Picture (PIP) feature. This allows you to watch two (2) live broadcasts at the same time with or without an external video source such as a VCR, cable box, etc.




## Basic PIP Operation

**1** PIP

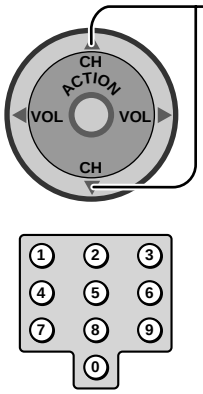
Press the PIP button on the remote control to display the PIP Frame on screen.

**Note:**
Audio is from Main Picture only.

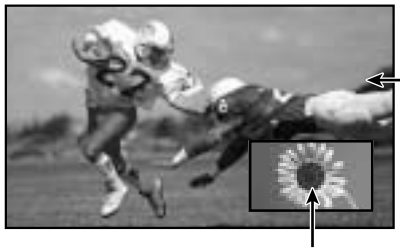
**2** PIP CH VCR CH

Select channels for the PIP frame by pressing PIP CH VCR CH .

**3**




Press to select channel for the Main Picture.
or
Use the remote control numeric keypad.




**4** RECALL

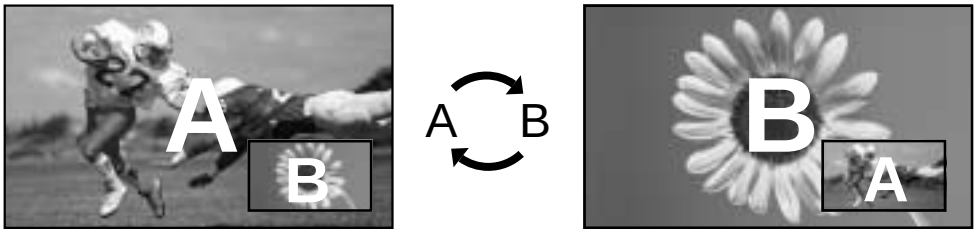
Press to view picture source status.

**5** PIP

Press PIP again to cancel the PIP Frame.

**SWAP** SWAP

Press SWAP to switch the PIP and MAIN PICTURE source.

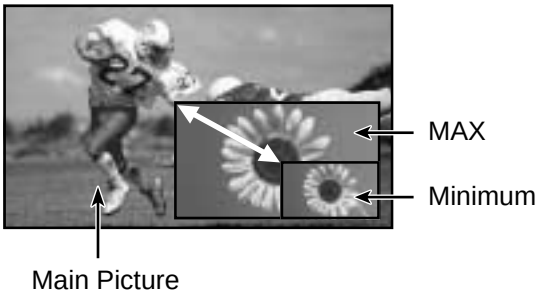


## PIP MIN, PIP MAX

PIP MIN REW PIP MAX FF

These features are used to size PIP Frame.

Press PIP MIN REW or PIP MAX FF to size the PIP Frame.




## Freeze

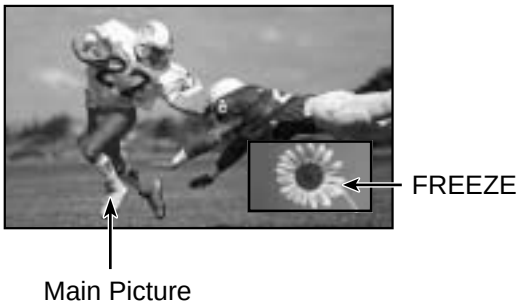
FREEZE TV/VCR

During PIP operation this feature is used to stop action in PIP frame.

**1** Press FREEZE TV/VCR to stop PIP frame action.

**2** Press FREEZE TV/VCR again to continue action.

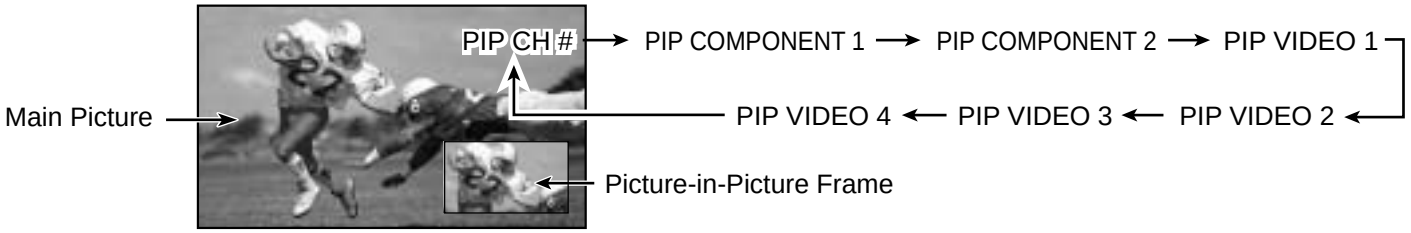
**Note:**
To stop action for Main picture:
1 In PICTURE MENU OTHER ADJ2, select FREEZE PIP or SPLIT (see p33).
2 Press FREEZE TV/VCR while PIP frame is not displayed.




## TV/VIDEO Button

TV/VIDEO

Press when PIP frame is displayed to select desired input mode.



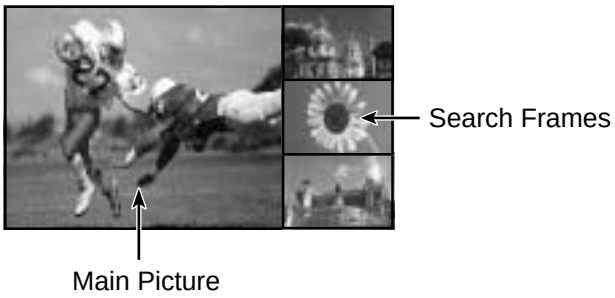

## Search

SEARCH OPEN/CLOSE

This feature lets you scan through all available channels.

**1** Press SEARCH OPEN/CLOSE to display search frames.

**2** Press SEARCH OPEN/CLOSE again to stop search feature. This returns the screen to the previous condition (single screen, PIP screen or SPLIT screen).

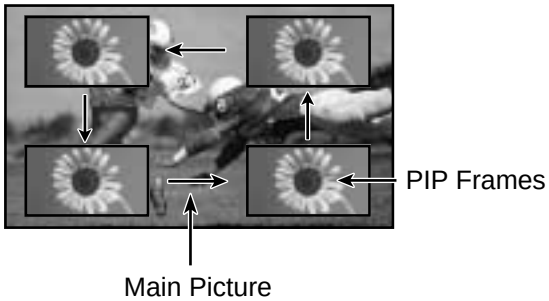



## Move

MOVE

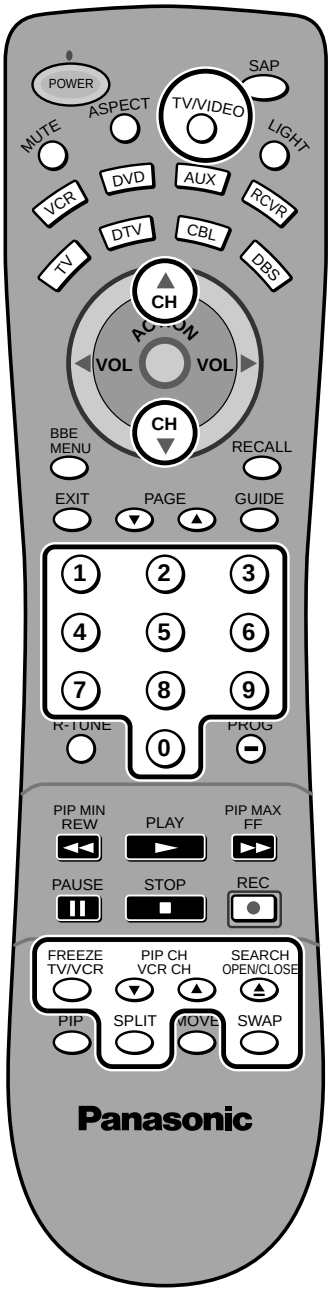
This feature is used to move PIP frame to one of four corners.

Press MOVE to position PIP frame to desired corner.



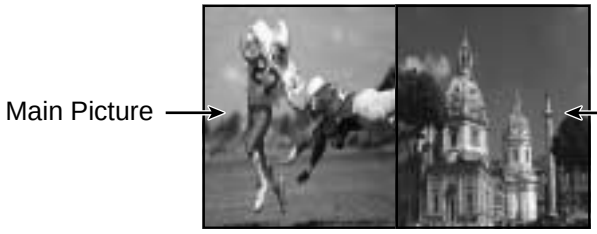
# Split Screen

This feature lets you watch two different channels side by side with or without an external video source.
The audio is from the Main picture only (left side).
Split screen enables you to search other channels on the right screen or check video recording status.




## Splitting the screen

**1** Press SPLIT to display Split screen.




(The previously selected screen appears.)

**2** Returning to one screen.
Press SPLIT again to return.

Main Picture

## Freezing pictures

During Split Screen this feature is used to stop action in SPLIT screen.

**1** FREEZE TV/VCR Press FREEZE TV/VCR to stop action in SPLIT screen.

**2** Press FREEZE TV/VCR again to recover.

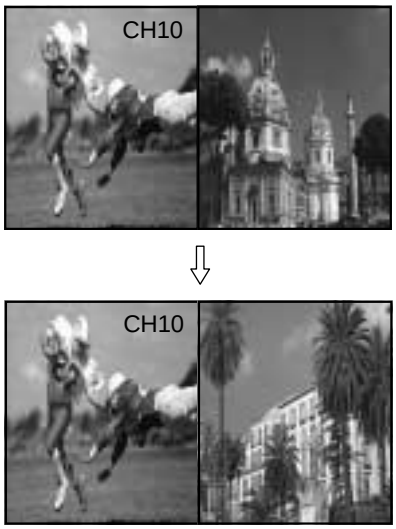
**Note:**
To stop action for Main picture:
1 In PICTURE MENU OTHER ADJ2, select FREEZE PIP or SPLIT (see p33).
2 Press FREEZE TV/VCR while SPLIT frame is not displayed.

**Notes:**
(1) Sound from the left screen is output from the speakers on the TV set (and earphone jacks).
(2) When the screen is split, signals of the left screen are output from the rear monitor output terminal.
(3) The left and right screen are processed by individual circuits, and therefore, may have slight variation in sound and image quality.
(4) Split screen returns to single screen when the TV is turned off.
(5) The right and left screens cannot display the same picture at the same time.
(6) Use the right screen when playing video games on a split screen (to avoid distortion of images).

## Changing the channels for the Split Screen

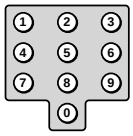
PIP CH
VCR CH

Select channels for the Split Screen by pressing PIP CH / VCR CH .




## Changing the channels for the Main Picture

▲ CH
CH ▼

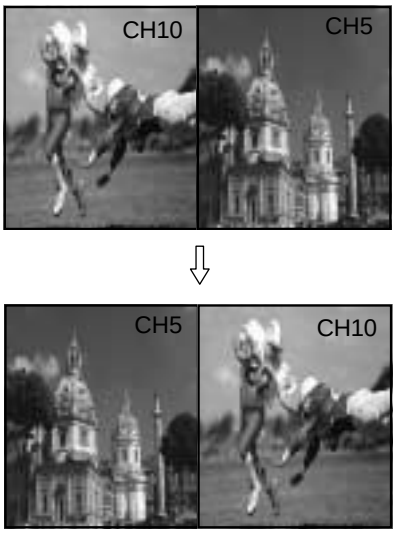



Select channels for the Main Picture by pressing ▲ CH / CH ▼ or use the remote control numeric keypad.

## Swapping left and right screens

SWAP

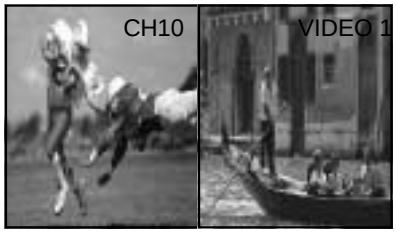
Press SWAP to switch the SPLIT SCREEN and MAIN PICTURE source.




## Viewing Videos

TV/VIDEO

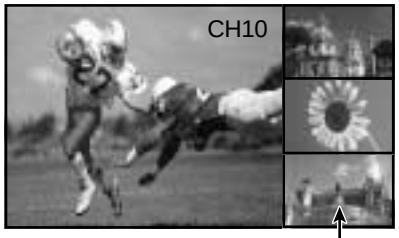
While Split screen is displayed, press TV/VIDEO to switch modes.




## Searching the other channels

SEARCH
OPEN/CLOSE

press SEARCH OPEN/CLOSE to search the other channels.

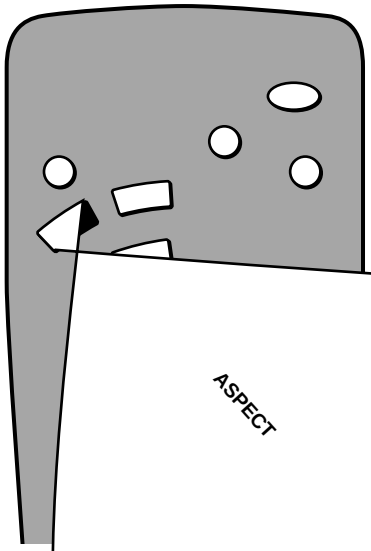



Search Frames

Press SEARCH OPEN/CLOSE again to stop the search.
This returns the screen to its previous condition.

# ASPECT Controls

The color monitor will allow you to enjoy viewing the picture at its maximum size, including wide screen cinema format picture.

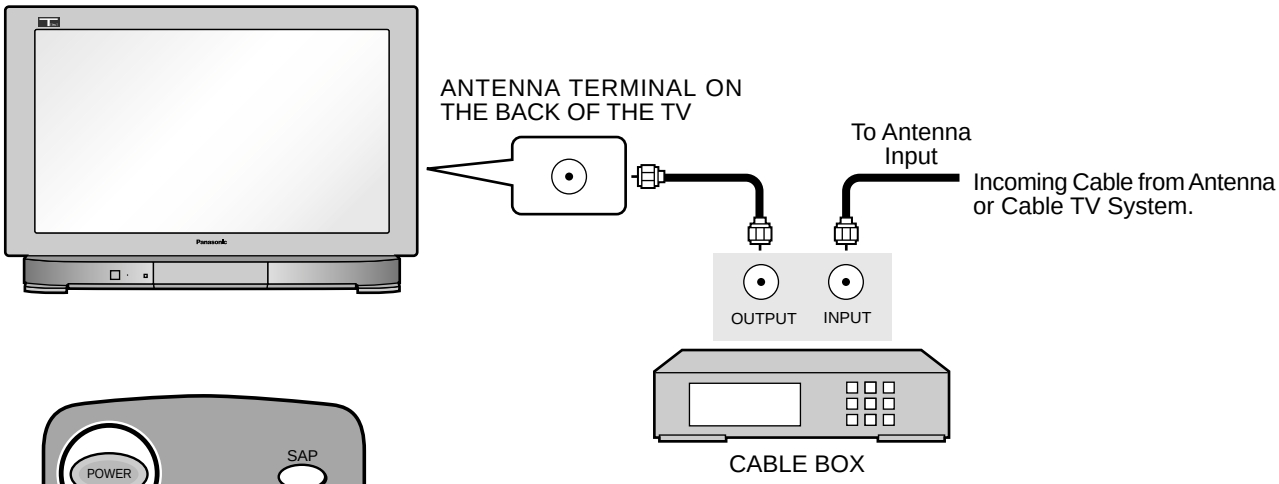


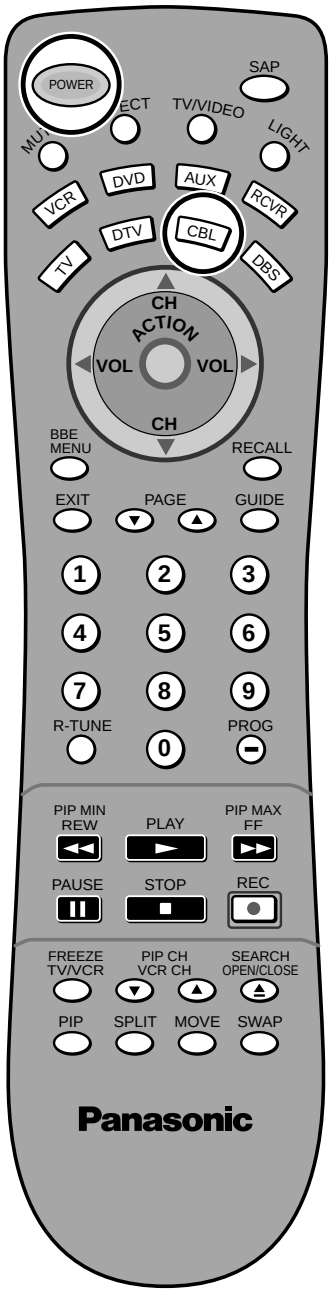

**ASPECT button**
The aspect mode changes each time the ASPECT button is pressed.

**Notes:**
(1) For a 480p signal input during component input signal mode, the

# Cable TV

When the antenna cable is connected to the TV antenna terminal via a cable box or VCR, set the TV channel to CH3 or CH4. This does not apply when signal is input from VIDEO INPUT.




## Confirming

Confirm that registration with cable TV provider and connection of equipment are completed. Turn the CABLE BOX on and select the desired volume level.

**1** CBL Press CBL to confirm.

**2** POWER Press while pointing the remote control towards the CABLE BOX.

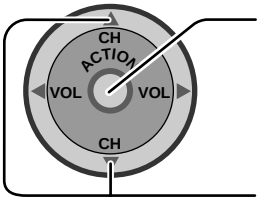
**Note:**
The remote control code number is set for Panasonic products.
When peripheral equipment does not operate, reset code (See page 62 - 63).

**3** Operate the CABLE BOX and select the desired volume level.

# TIMER

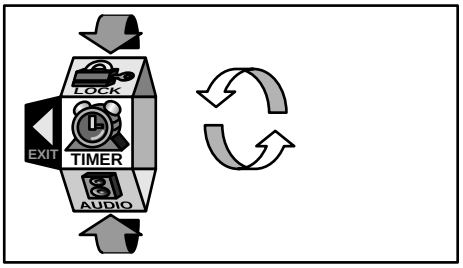
The TIMER can switch the TV ON or OFF. Before attempting TIMER1 and TIMER2 confirm the CLOCK SET and adjust if necessary. Then set TIMER1 and TIMER2.

**1**

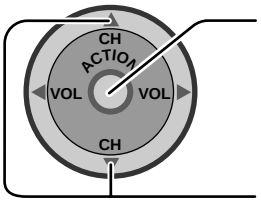



Press to display the roller guide menu.

Press to rotate to TIMER.




**2**

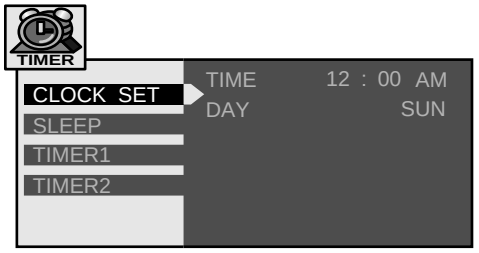



Press to display TIMER.

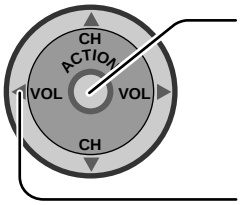
Press to select the main menu.

⇩

Proceed to each adjustment item of the selected main menu.

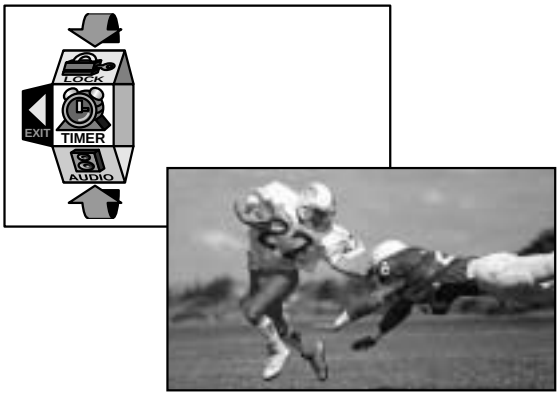



**3 To end Adjustment:**




Press twice to return to the roller guide.

Press to exit roller guide.
This returns the set to normal viewing.

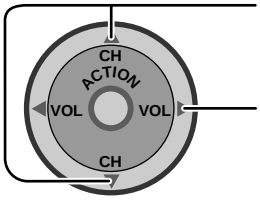



NORMAL PICTURE

## CLOCK SET

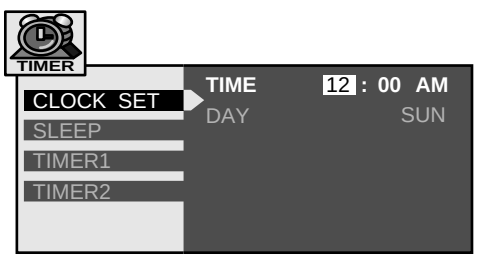
CLOCK SET sets the present time. This is necessary to operate the TIMER features.

**1**

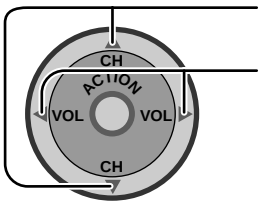



In TIMER menu press to select CLOCK SET.

Press to enter submenu field.

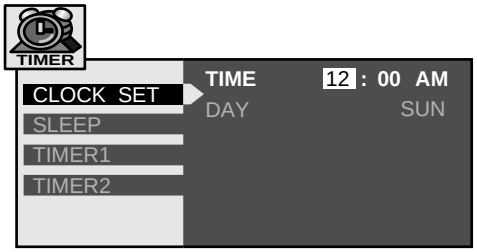


**2 TIME** Set the time of day.

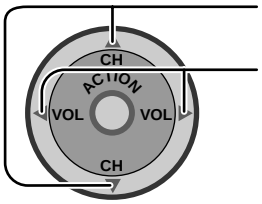



Press to select TIME

Press to set hours AM or PM.

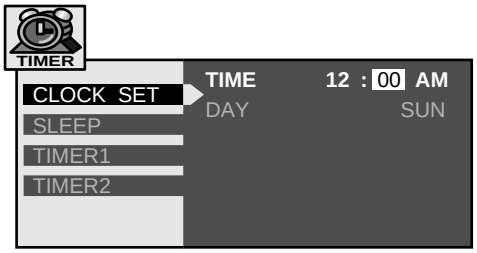



**3**

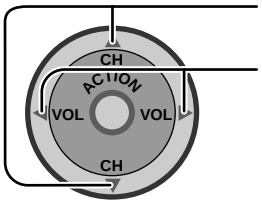



Press to move to minutes position.

Press to set minutes.

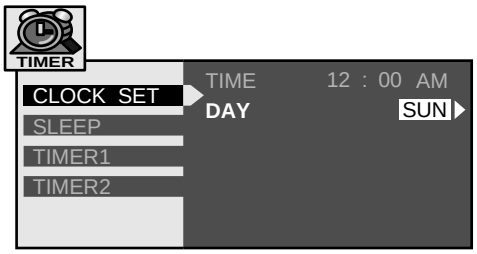



**4 DAY** Set the day of the week.




Press to select DAY.

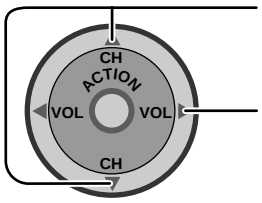
Press to select the day of the week.




## SLEEP

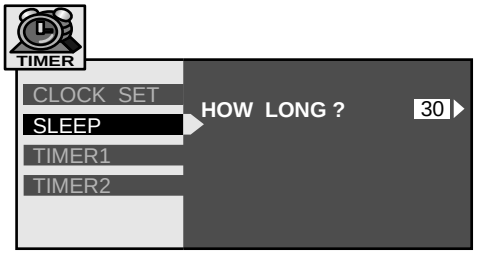
SLEEP sets the sleep time.

**1**

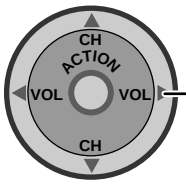



In TIMER menu press to select SLEEP.

Press to enter submenu field.




**2**

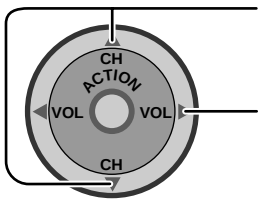



Press to select the desired sleep time.
To turn off the timer select NO.

NO → 30 → 60 → 90

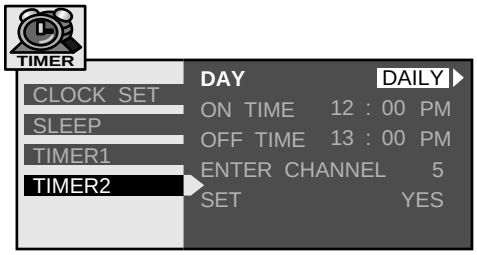
# Timer1 and Timer2

In TIMER menu, select one or both timers to turn the television on and off at selected times, on selected channels, and on selected days.TIME must be entered in CLOCK SET to operate the TIMER features.

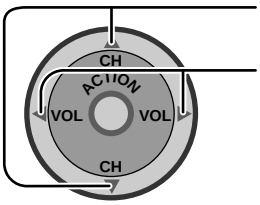



In TIMER menu press to select TIMER1 or TIMER2.

Press to enter submenu field.

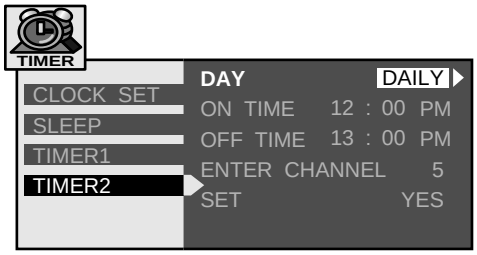



**DAY** Set the day of the week.



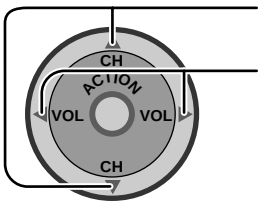

Press to select DAY.

Press to set the day of the week.
(select day or days)



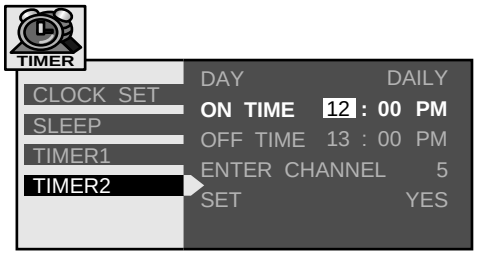

**ON TIME** Set the time of day.

**1**

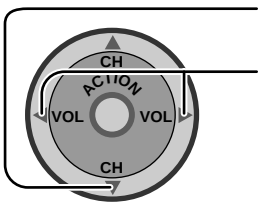



Press to select ON TIME.

Press to set hours AM or PM.

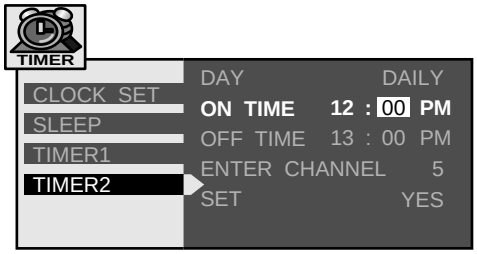



**2**



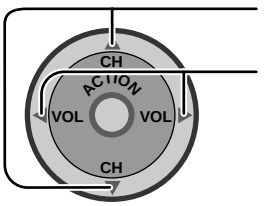

Press to move to minutes position.

Press to set minutes.



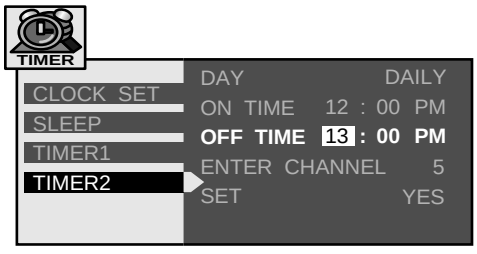

**OFF TIME** Set the time of day.

**1**

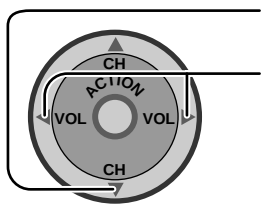



Press to select OFF TIME.

Press to set hours AM or PM.

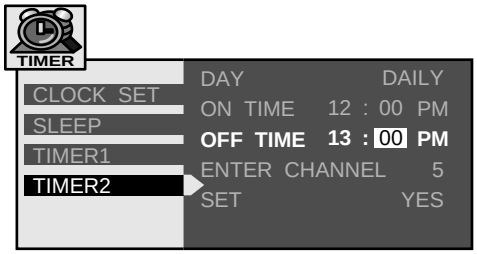



**2**



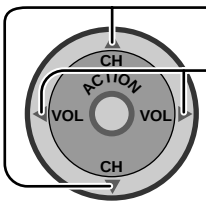

Press to move to minutes position.

Press to set minutes.



## ENTER CHANNEL

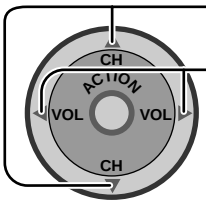
**1**




Press to select ENTER CHANNEL.

Press to select channel.

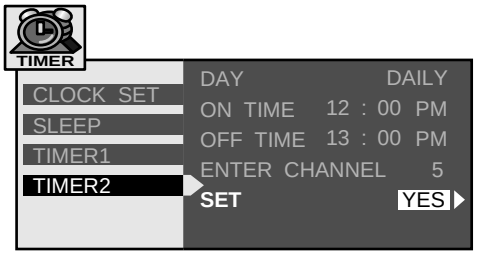
**2**




Press to select SET.

Press to select YES.

YES ⟷ NO




| ***TIMER Activation*** |
|---|
| The TIMER is active when the television is OFF or ON. The television will switch to the selected channel at the selected time set in the TIMER. |

| ***Turn Off After 90 Minutes*** |
|---|
| The television automatically turns OFF after 90 minutes when turned ON by the TIMER. If the OFF time is selected or if a key is pressed, the automatic OFF after 90 minutes will be cancelled. |

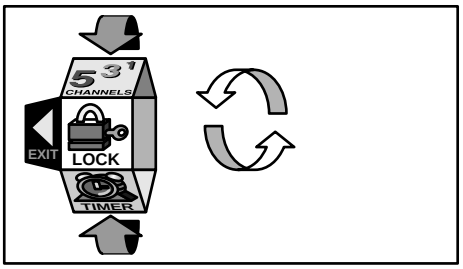
**Notes:**

(1) When the power to the TV set is disrupted due to a power outage or similar problem, after power is restored, the off-timer will be deactivated and the TV will be in standby mode.

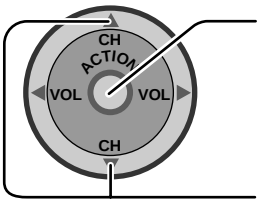
(2) To see the remaining sleep time, press the RECALL button.

# LOCK Feature

Select LOCK SET to prevent video games and VCR tapes from being viewed.



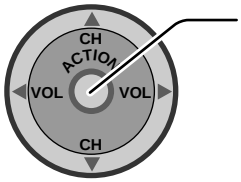

**1**



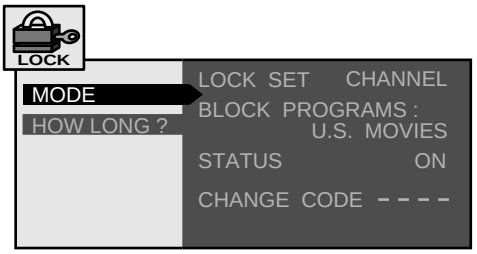

Press to display the roller guide menu.

Press to rotate to LOCK.

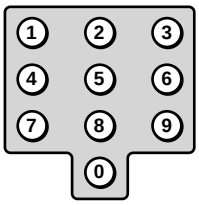
**2**




Press to display LOCK menu.

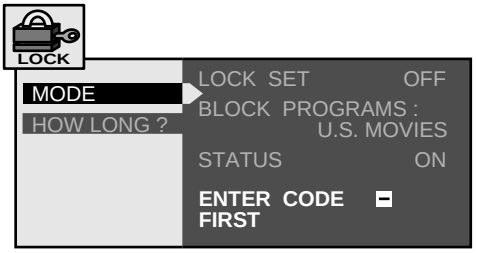



**MODE** To use LOCK options ENTER CODE FIRST.




Use the remote numeric keypad to enter a four-digit secret code.

After entering your secret code for the first time, the onscreen display will change to CHANGE CODE.



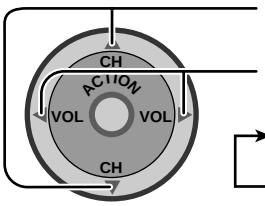

**Notes:**

(1) Use a code that is easy to remember and record it in a safe place.

(2) If you do not remember your code, LOCK will unlock in 12, 24, or 48 hours, depending on the current setup. Be cautious when selecting ALWAYS. If ALWAYS is selected, and you forget your secret code, the TV must be serviced by a qualified technician to clear the LOCK setup.

(3) If you select CHANGE CODE, and you change your code from the one used in the LOCK menu, your new code becomes the controlling code.

## LOCK SET



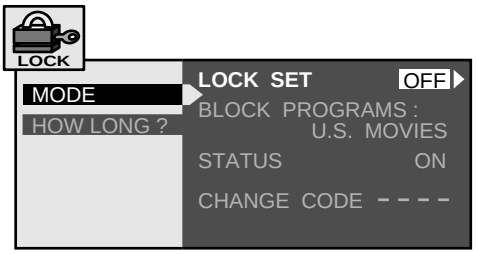

In MODE submenu press to select LOCK SET.

Press to select LOCK MODE.

OFF ⟷ GAME ⟷ CHANNEL ⟷ ALL

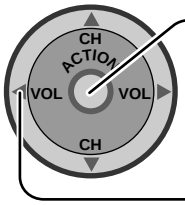
⇩

Proceed to each adjustment menu.



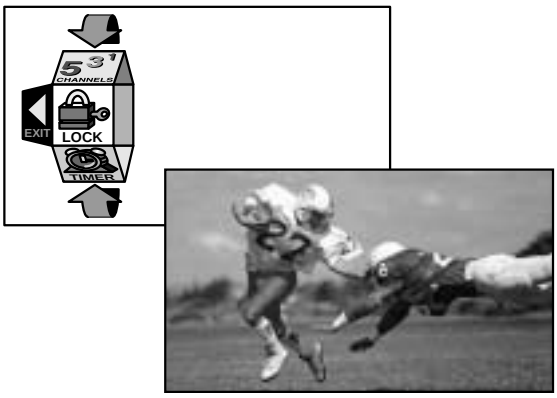

| MODE | Function |
|---|---|
| **OFF** | Turns Lock function off. |
| **GAME** | Lock CH 3, 4 and Video inputs. |
| **CHANNEL** | Lock up to four channels. |
| **ALL** | Locks all channels and video inputs. |

### To end Adjustment:



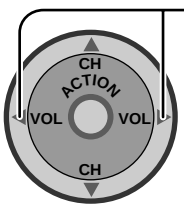

Press twice to return to the roller guide.

Press to exit roller guide.
This returns the set to normal viewing.

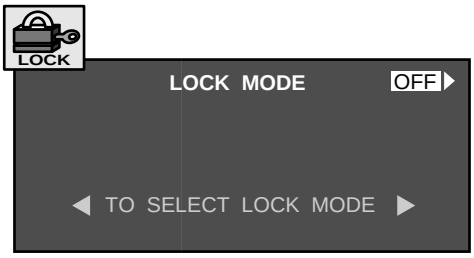



NORMAL PICTURE

### OFF

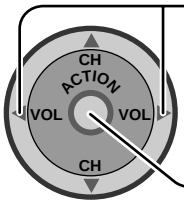



In LOCK MODE press to select OFF.



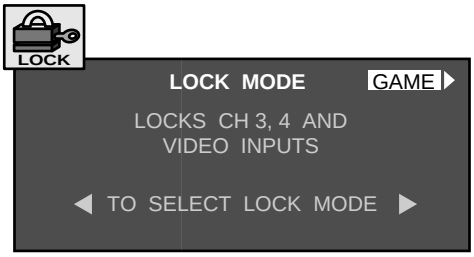

### GAME

**1**

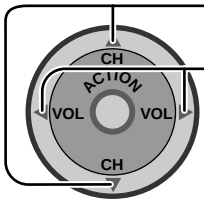



In LOCK MODE press to select GAME.

Press ACTION twice.




**2**

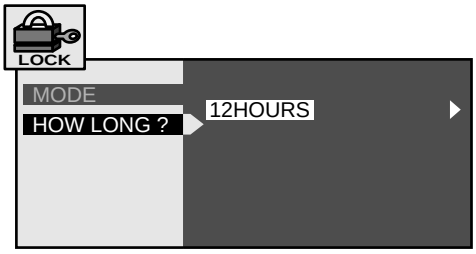



Press to highlight HOW LONG ?

Press to select 12HOURS, 24HOURS, 48HOURS or ALWAYS.

12HOURS ⟷ 24HOURS

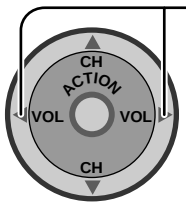
ALWAYS ⟷ 48HOURS

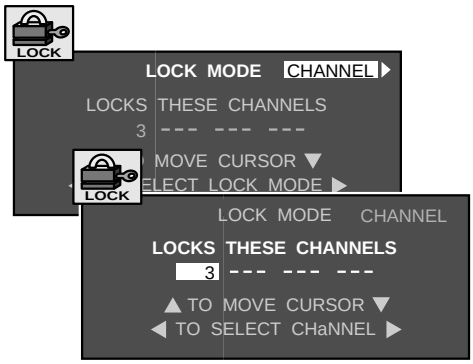


# LOCK Feature

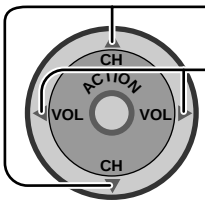
## CHANNEL

**1** In LOCK MODE press to select CHANNEL.

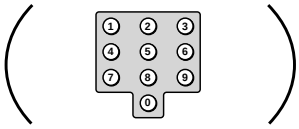



**2** Press to select channel position.

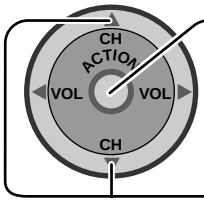



Press to select channels.
(Or use remote numeric keypad to select channels.)

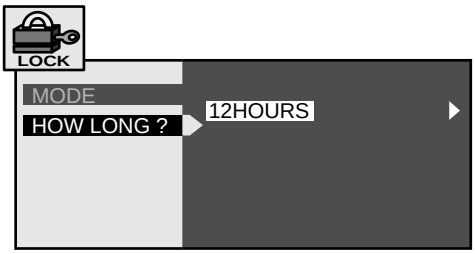



**3** Repeat step 2 for up to four channels.

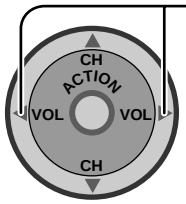
**4** Press ACTION twice.




Press to highlight HOW LONG ?



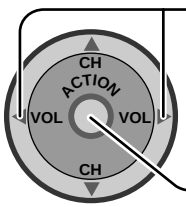

**5** Press to select 12HOURS, 24HOURS, 48HOURS or ALWAYS.

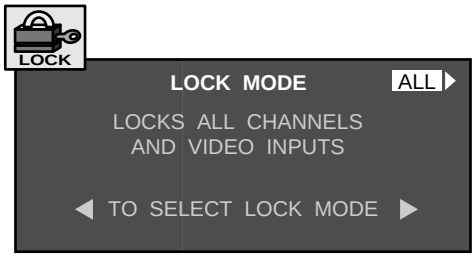



12HOURS ⟷ 24HOURS
ALWAYS ⟷ 48HOURS

## ALL

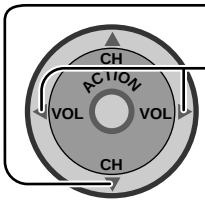
**1** In LOCK MODE press to select ALL.



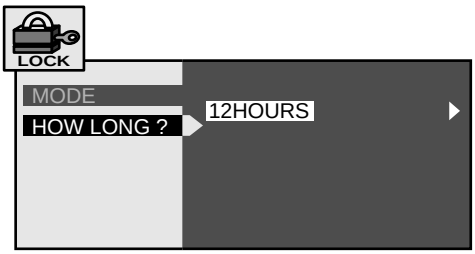

Press ACTION twice.

**2** Press to highlight HOW LONG ?




Press to select 12HOURS, 24HOURS, 48HOURS or ALWAYS.

12HOURS ⟷ 24HOURS
ALWAYS ⟷ 48HOURS

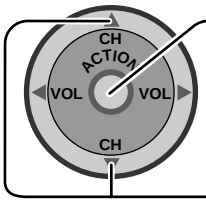



**Note:**
PG will display on screen if a blocked channel or video input is selected.

# V-CHIP Menu OPERATION

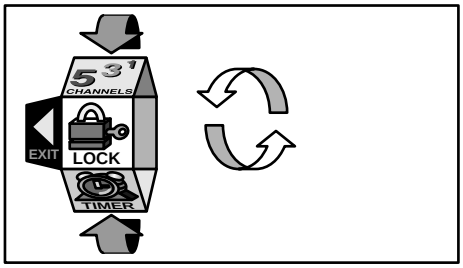
In the United States and Canada, the V-CHIP consists of two rating systems, which are MPAA (MOTION PICTURE) and TV PARENTAL GUIDELINES. Its function is to block programs by following the rating data in the XDS data packets sent from broadcasting stations. The user can select which rating programs should be blocked by using the LOCK MENU options.

**1**

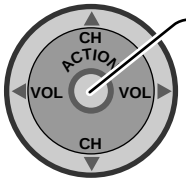



Press to display the roller guide menu.

Press to rotate to LOCK.

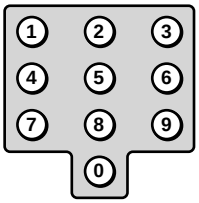



**2**

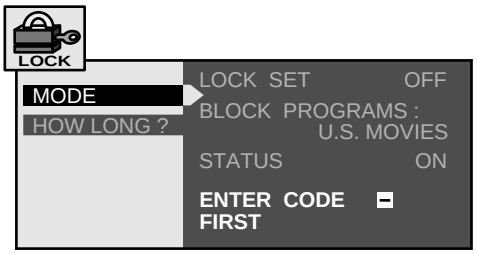



Press to display LOCK menu.

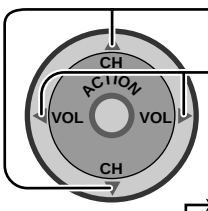
**3**




Use the numeric keypad to enter your number digit code.
(Use a code that is easy to remember and record it in a safe place.)




**4**




Press to enter the BLOCK PROGRAM field.

Press to select the desired menu.

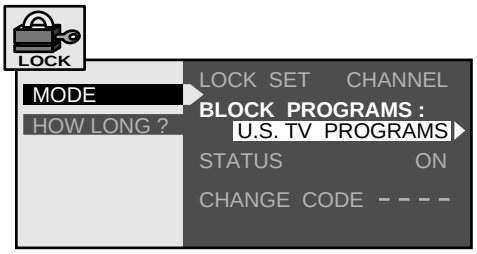
The menu will change as follows:

U.S. TV PROGRAMS ⟷ CANADIAN ENGLISH

U.S. MOVIES ⟷ CANADIAN FRENCH

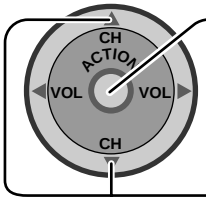
⇩

Proceed to the selected menu.



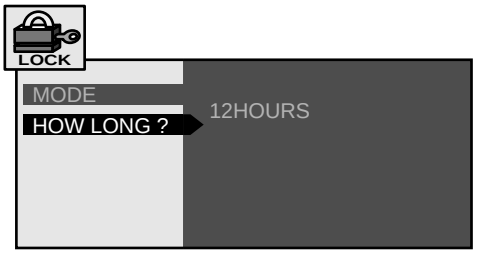

### After finished with adjustments in the selected menu:

**1**

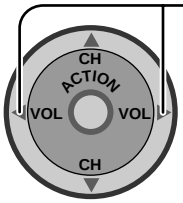



Press twice to return to MODE in LOCK menu.

Press to select HOW LONG?



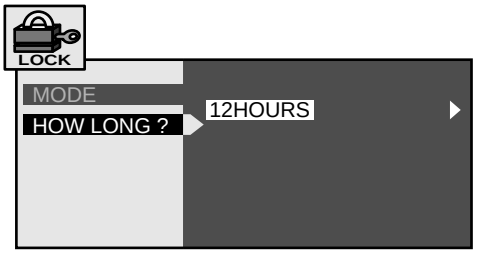

**2**




Press to select 12HOURS/24HOURS/48HOURS / ALWAYS.

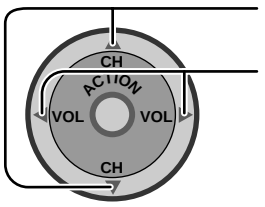
12HOURS ⟷ 24HOURS

ALWAYS ⟷ 48HOURS



# U.S. TV PROGRAMS

This TV model features the “V-Chip technology” which allows you to use U.S. TV PROGRAMS Guide ratings to block various types of TV programs. PIP will also be blocked automatically.

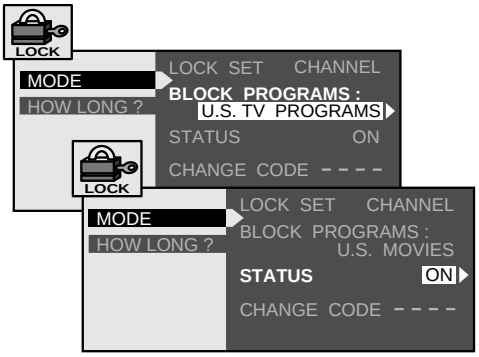



In U.S. TV PROGRAMS press to highlight STATUS.

Press to display U.S. TV PROGRAMS RATING CHART.

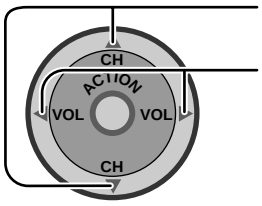
⇩

Proceed to the following adjustments.




**U.S. TV PROGRAMS RATING CHART**

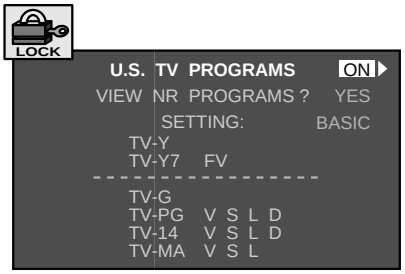
**1**



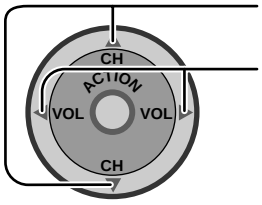

Press to select U.S. TV PROGRAMS.

Press to select U.S. TV PROGRAMS ON or OFF.

ON ⟷ OFF




**2**

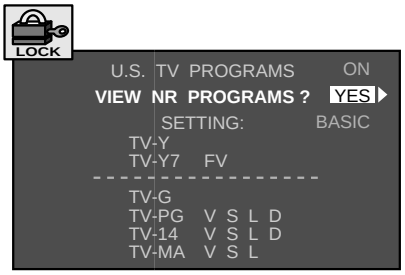



Press to select VIEW NR PROGRAMS?.

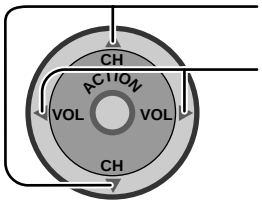
Press to select VIEW NR PROGRAMS? YES or NO.

YES ⟷ NO

YES: NR programs will be received.
NO: NR programs will be blocked.




**3**



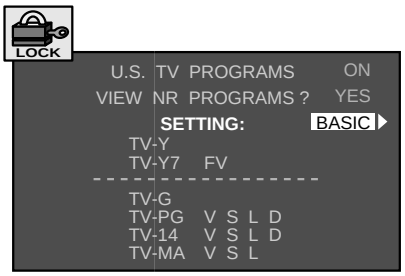

Press to select SETTING.

Press to select BASIC or DETAILED.

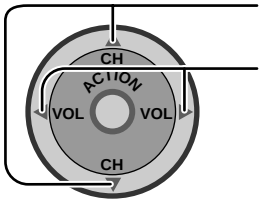
BASIC: Allows you to select only general ratings such as TV-Y, TV-PG, etc.

DETAILED: Allows you to select both general ratings and content such as V, L, etc.

**Note:** See Customer Caution.




**4**

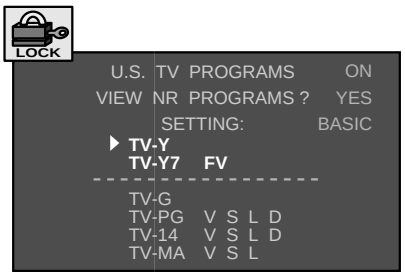



Press to move between different ratings.

Press to select ratings you would like to block (RED) and unblock (GREEN).

Perform Step 4 for each rating.

**Note:** See the U.S. TV PROGRAMS RATINGS CHART.



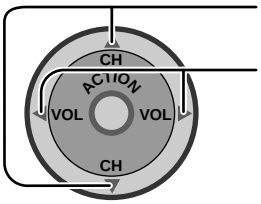
| *Customer Caution* |
|---|
| The V-Chip system that is used in this set is capable of blocking “NR” programs (non rated, not applicable and none) per FCC Rules Section15.120(e)(2). If the option of blocking “NR” programs is chosen “unexpected and possibly confusing results may occur, and you may not receive emergency bulletins or any of the following types of programming:”<br>• Emergency Bulletins (Such as EAS messages, weather warnings and others)<br>• Locally originated programming<br>• News<br>• Political<br>• Public Service Announcements<br>• Religious<br>• Sports<br>• Weather |

**U.S. TV PROGRAMS RATINGS CHART**

| | |
|---|---|
| **NR** | Not Rated. SEE CUSTOMER CAUTION above. |
| **TV-Y** | All children. The themes and elements in this program are specifically designed for a very young audience, including children from ages 2-6. |
| **TV-Y7** | Directed to older children. Themes and elements in this program may include mild physical or comedic violence, or may frighten children under the age of 7. |
| **TV-G** | General audience. It contains little or no violence, no strong language, and little or no sexual dialogue or situations. |
| **TV-PG** | Parental guidance suggested. The program may contain infrequent coarse language, limited violence, some suggestive sexual dialogue and situations. |
| **TV-14** | Parents strongly cautioned. This program may contain sophisticated themes, sexual content, strong language and more intense violence. |
| **TV-MA** | Mature audiences only. This program may contain mature themes, profane language, graphic violence, and explicit sexual content. |
| **FV** | FANTASY/CARTOON VIOLENCE |
| **V** | VIOLENCE |
| **S** | SEX |
| **L** | OFFENSIVE LANGUAGE |
| **D** | DIALOGUE WITH SEXUAL CONTENT |

# U.S. MOVIES

This TV model features the “V-Chip technology” which allows you to use Motion Picture Ratings when viewing movies or video tapes. This innovation allows parents to block various types of movies and video tapes at their discretion. PIP will also be blocked automatically.

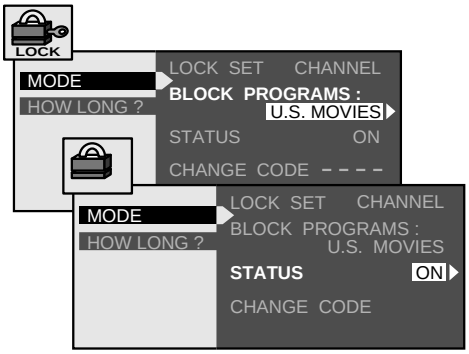



In U.S. MOVIES press to highlight STATUS.

Press to display U.S. MOVIES RATING CHART.

⇩

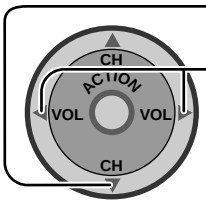
Proceed to the following adjustments.



# Canadian English

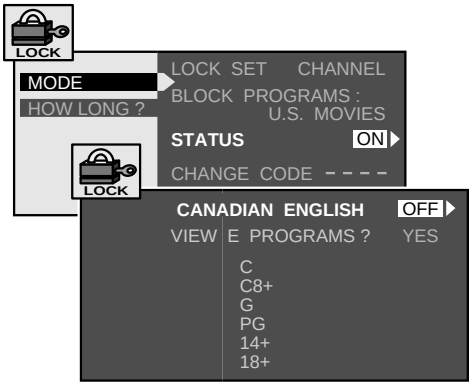
The V-CHIP used in this TV model allows you to block various types of movies and television programs based on the two rating systems used in Canada. PIP will also be blocked automatically.

**1**

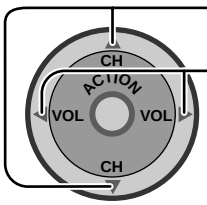



In CANADIAN ENGLISH press to highlight STATUS.

Press to display CANADIAN ENGLISH RATING CHART.




**2**

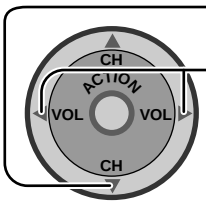



Press to select CANADIAN ENGLISH.

Press to select CANADIAN ENGLISH ON or OFF.

ON ⟷ OFF

**3**

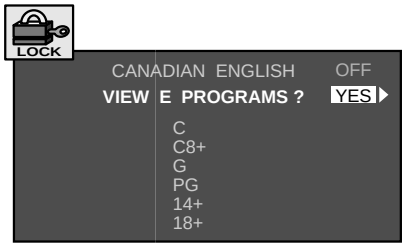



Press to select VIEW E PROGRAMS?

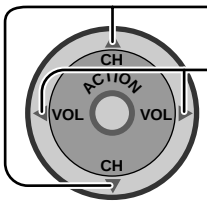
Press to select VIEW E PROGRAMS? YES or NO.

YES ⟷ NO

**Note:**
E (Exempt) programming includes: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.



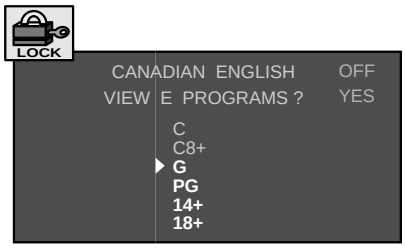

**4**




Press to move between different ratings.

Press to select ratings you would like to block (RED) and unblock (GREEN).

**Note:** See the CANADIAN ENGLISH RATING CHART.



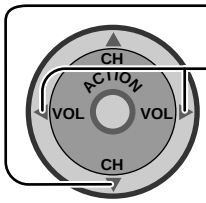

**CANADIAN ENGLISH RATINGS CHART**

| | |
|---|---|
| **E** | Exempt - Exempt programming includes: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming. |
| **C** | Programming intended for children under age 8. No offensive language, nudity or sexual content. |
| **C8+** | Programming generally considered acceptable for children 8 years and over. No profanity, nudity or sexual content. |
| **G** | General programming, suitable for all audiences. |
| **PG** | Parental Guidance suggested. Some material may not be suitable for children. |
| **14+** | Programming contains themes or content which may not be suitable for viewers under the age of 14. Parents are strongly cautioned to exercise discretion in permitting viewing by pre-teens and early teens. |
| **18** | ADULTS ONLY |

# Canadian French

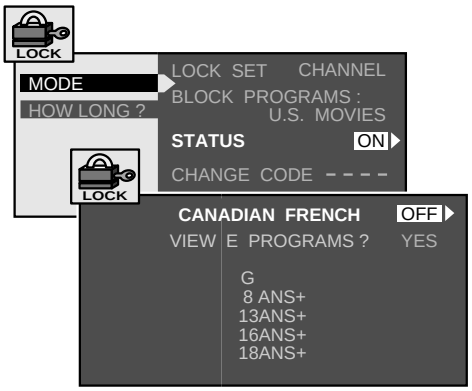
The V-CHIP used in this TV model also lets you block or unblock Canadian French programs according to various ratings categories. PIP will also be blocked automatically.

**1**

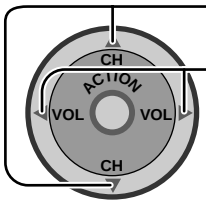



In CANADIAN FRENCH press to highlight STATUS.

Press to display CANADIAN FRENCH RATING CHART.




**2**

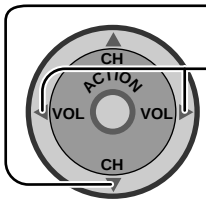



Press to select CANADIAN FRENCH.

Press to select CANADIAN FRENCH ON or OFF.

ON ⟷ OFF

**3**



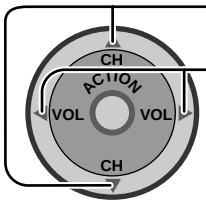

Press to select VIEW E PROGRAMS?

Press to select VIEW E PROGRAMS? YES or NO.

YES ⟷ NO

**Note:**
E (Exempt) programming includes: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.

**4**




Press to move between different ratings.

Press to select ratings you would like to block (RED) and unblock (GREEN).

**Note:** See the CANADIAN FRENCH RATINGS CHART.

**13ANS+, 16ANS+ and 18ANS+ will be blocked.**

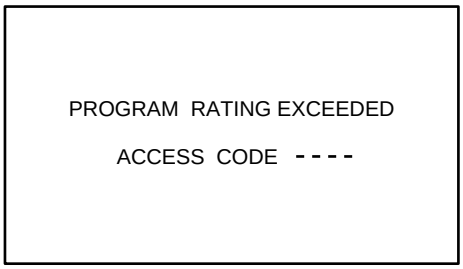
**CANADIAN FRENCH RATINGS CHART**

| | |
|---|---|
| **E** | Exempt - Exempt programming. |
| **G** | General - Programming intended for audience of all ages. Contains no violence, or the violence content is minimal or is depicted appropriately. |
| **8 ans+** | 8+ General - Not recommended for young children. Programming intended for a broad audience but contains light or occasional violence. Adult supervision recommended. |
| **13ans+** | Programming may not be suitable for children under the age of 13 - Contains either a few violent scenes or one or more sufficiently violent scenes to affect them. Adult supervision strongly suggested. |
| **16ans+** | Programming may not be suitable for children under the age of 16 - Contains frequent scenes of violence or intense violence. |
| **18ans+** | 18 ans +Programming restricted to adults. Contains constant violence or scenes of extreme violence. |

# Blocking Message

If V-Chip is enabled and the program exceeds the rating limit set by you, the blocking message will appear and the audio will be muted. Enter your four-digit secret code if you wish to continue viewing the program. After entering your code, all locks and rating blocks are disabled until the TV is turned off or until all settings are off.

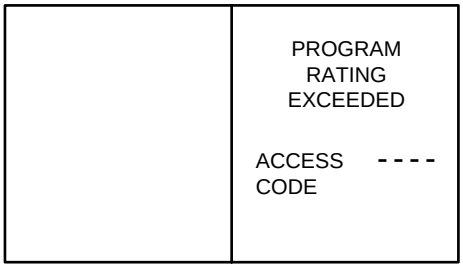
**Note:**
If you enter your four-digit secret code to override rating blocks, you must reset all rating blocks by either reprogramming or turning the TV off.




## Split Screen Blocking Message

Split Screen function is available when V-Chip is activated. If the program being viewed in Split Screen exceeds the set rating limit, Split Screen will disappear and a blocking message will appear on screen for 5 seconds.

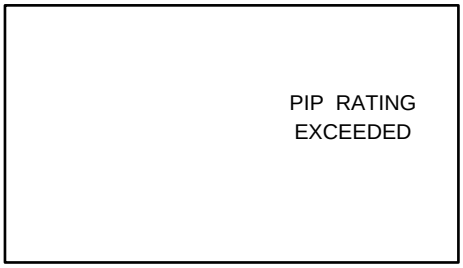
**Note:**
Enable Split Screen functions by setting Lock Set, U.S. TV PROGRAM, U.S. MOVIES, CANADIAN ENGLISH and/or CANADIAN FRENCH to OFF.



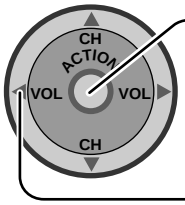

## PIP Blocking Message

PIP function is available when V-Chip is activated. If the program being viewed in PIP exceeds the set rating limit, PIP will disappear and a blocking message will appear on screen for 5 seconds.

**Note:**
Enable PIP functions by setting Lock Set, U.S. TV PROGRAM, U.S. MOVIES, CANADIAN ENGLISH and/or CANADIAN FRENCH to OFF.

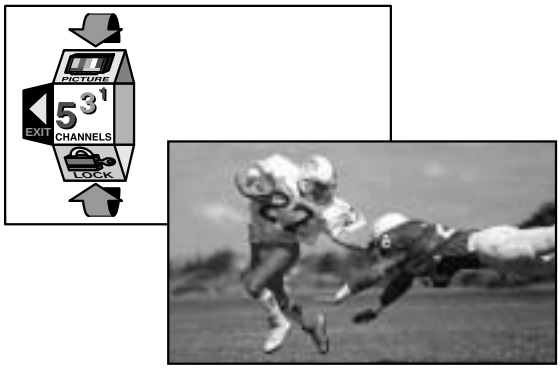



### To end Adjustment:




Press twice to return to the roller guide.

Press to exit roller guide.
This returns the set to the normal viewing.




NORMAL PICTURE

# Operating peripheral equipment using the remote control

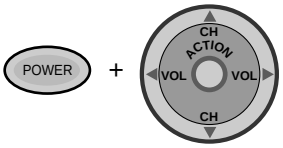
## Programming The Illuminated Remote Control Using Access Codes

The Universal Remote Control can be programmed to operate many manufacturers' components, using the component function buttons for VCR, DVD, AUX, RCVR, TV, DTV CABLE or DBS. Follow the procedures for programming your Remote Control with or without a code for the component.

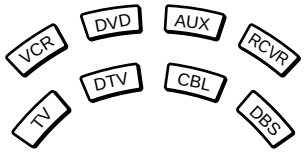
**Determine the manufacturer of the component and look in the table for the code.**

**1** Confirm that the external component is plugged in and operating.

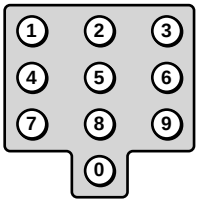
**2** Turn the component off.

**3** 


Press **POWER** and **ACTION** together, **for at least 5 seconds**.
After 5 seconds, all the illuminated mode keys will begin to flash.
Release the POWER and ACTION keys.

**4** 


Press the mode key.
The mode key will illuminate steadily, all others will go out.

**5** 


Enter the 3-digit component code using the Remote Control numeric keypad.

**6**


Press the Remote Control

to test the component. If the procedure is successful, the component will turn on.

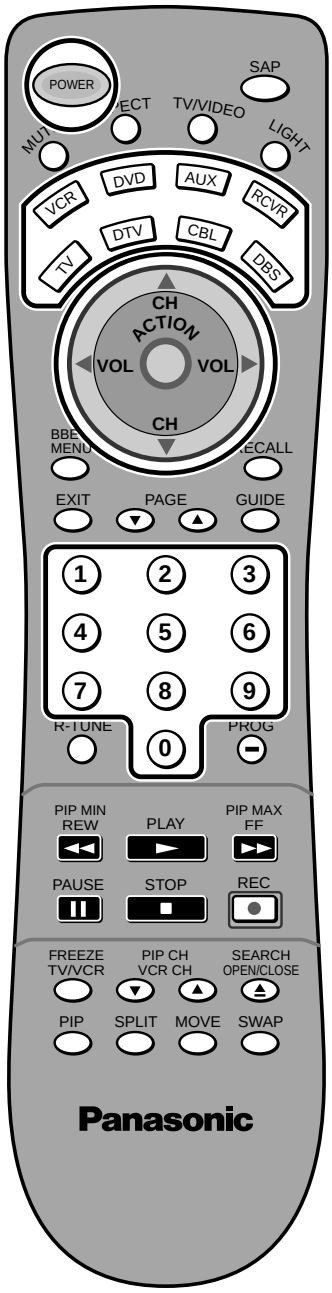
**Default Modes For Remote Control**

| Device | Operates | Default |
|---|---|---|
| **TV** | TV (Panasonic Only) | Panasonic TV Codes |
| **DTV** | DTV (Panasonic Only) | Panasonic DTV Codes |
| **CABLE** | CABLE (Preset) | Panasonic CABLE Codes |
| **DBS** | DBS (Preset) | Panasonic DBS Codes |
| **VCR** | VCR (Preset) | Panasonic VCR Codes |
| **DVD/CD** | DVD and CD (Preset) | Panasonic DVD Codes |
| **AUX** | Personal Video Recorders, Tape and VCR2 | Panasonic Personal Video Recorders Code |
| **RCVR** | Audio Receiver (Preset) | Panasonic RCVR Code |

| ***Helpful Hints: Unsuccessful Code*** |
|---|
| If the component does not operate with the Remote Control, repeat the procedure using another code. (Some brands have multiple codes).<br>If an incorrect code is entered, or if the procedure takes longer than 30 seconds,the programming will fail. |

# Programming Without A Code (When the code is not known)

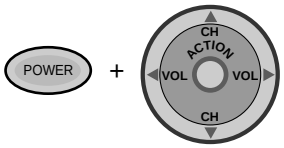
This procedure searches all codes and is called the “sequence method.”




**1** Confirm that the external component is plugged in and on.

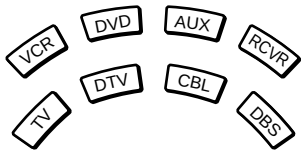
**2** Turn the component off.

**3**



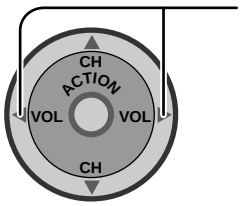

Press **POWER** and **ACTION** together, **for at least 5 seconds**.
After 5 seconds, all the illuminated mode keys will begin to flash.
Release the **POWER** and **ACTION** key.

**4**




Press the mode key.
The mode key will illuminate steadily, all others will go out.

**5**




Press to move forward to the next code, or to move backward.

**6**

Press the Remote Control

to test the component. If the procedure was successful, the component will turn on.

**Note:**
Repeat the above steps until the component code is found. It may take many attempts before the correct code is found.

**7**

After the code is found, press ACTION to store the code.

**Note:**
The step and set mode will start from the current device (not the beginning of the list, except for the first time).

# Infrared Codes Index

The remote control is capable of operating many brands of peripheral equipment. Refer to pages 62 and 63 for programming procedures.

**Note:** The remote control memory is limited and therefore some models may not operate. The remote control is not designed to control all features available in all models.

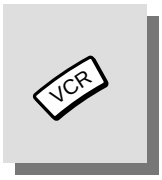
**Note:** After entering the proper infrared code, press the desired Mode Selection Button on the remote control. Refer to pages 16 and 67 - 68 for details on operating peripheral equipment using the remote control.

## Infrared Remote Codes for Specific Components

Helpful Hint: Write down the code numbers for your components in the space provided below. This will serve as a handy reference whenever you need to reprogram your remote control.

| | | |
|---|---|---|
| **CABLE** Cable Box | **VCR** Video Cassette Recorder | **CD** Compact Disc Player |
| **DBS** Digital Broadcast System | **RCVR** Receiver or Amplifier | **LD** Laser Disc Player |
| _____ Other Component | _____ Other Component | _____ Other Component |
| _____ Other Component | _____ Other Component | _____ Other Component |

| Brand | Code |
|---|---|
| Orion | 320, 326 |
| Panasonic | 321, 322, 323, 324 |
| J.C.Penney | 300, 305, 310, 311, 324, 339, 345 |
| Pentax | 300, 311, 345 |
| Philco | 320, 323, 324, 326, 331, 343 |
| Philips | 323, 324, 331 |
| Pioneer | 323 |
| Proscan | 300, 301, 302, 323, 324, 331, 333, 345, 346 |
| Quasar | 321, 322, 323, 324 |
| Radio Shac | 305, 309, 324, 333, 336, 340 |
| RCA | 300, 301, 302, 323, 324, 331, 333, 345, 346 |
| Realistic | 305, 309, 324, 336, 340 |
| Samsung | 302, 304, 333 |
| Sansui | 320, 326, 339, 352 |
| Sanyo | 305, 309, 313 |
| Scott | 301, 302, 304, 309, 320, 326, 338, 340, 347, 348 |
| Sears | 300, 305, 306, 307, 308 |
| Sharp | 335, 336 |
| Shintom | 317 |
| Signature 2000 | 335 |
| Singer | 317 |
| Sony | 328, 329, 330 |
| Sylvania | 323, 324, 331 |
| Tashiro | 306 |




## Codes for Personal Video Recorders

| Brand | Code |
|---|---|
| Panasonic Replay | 100 |
| Philips Tivo | 101 |
| Sony Tivo | 102 |

## Codes for DVD

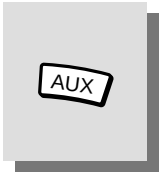
| Brand | Code |
|---|---|
| Denon | 100 |
| Ferguson | 101 |
| JVC | 109 |
| Mitsubishi | 105 |
| Nordmende | 101 |
| Panasonic | 100 |
| Philips | 103 |
| Pioneer | 102 |
| RCA | 101 |

| Brand | Code |
|---|---|
| Saba | 101 |
| Samsung | 110 |
| Sharp | 108 |
| Sony | 104 |
| Technics | 100 |
| Thomson | 101 |
| Toshiba | 103 |
| Yamaha | 100 |
| Zenith | 107 |

## Codes for CD

| Brand | Code |
|---|---|
| Admiral | 226 |
| Aiwa | 233, 235 |
| Carver | 229 |
| Denon | 242 |
| Emerson | 239 |
| Fisher | 205 |
| Harman/Kardon | 219, 220, 221, 223 |
| Hitachi | 207 |
| Jensen | 234 |
| JVC | 240, 241, 245 |
| Kardon | 223 |
| Kenwood | 200, 201, 211, 245 |
| LXI/Sears | 236 |
| Magnavox | 229, 232 |
| Marantz | 229 |
| McIntosh | 221 |
| Nakamichi | 210 |
| Onkyo | 214, 215 |

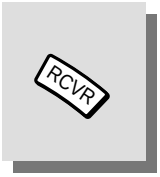
| Brand | Code |
|---|---|
| Optimus | 208, 218, 220, 222 |
| Panasonic | 224, 225, 227 |
| Philips | 229, 230 |
| Pioneer | 208 |
| Quasar | 224, 225, 227 |
| RCA | 231, 237, 238, 247 |
| Sansui | 210, 246 |
| Sanyo | 205 |
| Scott | 210, 246 |
| Sharp | 242, 243 |
| Sherwood | 220 |
| Sony | 228 |
| Soundesign | 244 |
| Teac | 212, 216, 218 |
| Technics | 224, 225, 227 |
| Victor | 240, 241, 245 |
| Yamaha | 202, 203, 204 |




## Codes for Cassette Deck

| Brand | Code |
|---|---|
| Aiwa | 223, 224, 225 |
| Denon | 231 |
| Fisher | 203 |
| Jensen | 214 |
| JVC | 229, 230 |
| Kenwood | 200, 207 |
| Marantz | 202 |
| Nakamichi | 205 |
| Onkyo | 208, 209, 213 |
| Panasonic | 216, 218 |

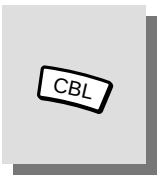
| Brand | Code |
|---|---|
| Philips | 222 |
| Pioneer | 204 |
| RCA | 226, 227, 228 |
| Sansui | 205, 210 |
| Sharp | 231 |
| Sony | 219, 220 |
| Teac | 210, 211, 215 |
| Technics | 216, 218 |
| Yamaha | 201, 202 |




## Codes for Receivers

| Brand | Code |
|---|---|
| Admiral | 120 |
| Aiwa | 125, 126 |
| Denon | 134, 135, 136 |
| Fisher | 104 |
| Garrard | 113 |
| Harman Kardon | 115, 123 |
| Jensen | 129 |
| JVC | 132, 133 |
| Kenwood | 100, 108 |
| Magnavox | 127 |
| Marantz | 124 |
| Mclntosh | 116 |
| Nakamichi | 106 |
| Onkyo | 109, 114 |

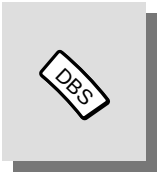
| Brand | Code |
|---|---|
| Optimus | 103, 127, 130, 131 |
| Panasonic | 118, 119, 121 |
| Philips | 123 |
| Pioneer | 105, 107 |
| Quasar | 118, 119, 121 |
| RCA | 103, 105, 127, 130, 131 |
| Sansui | 103, 111, 139 |
| Sharp | 134, 137 |
| Sony | 122 |
| Soundesign | 138 |
| Teac | 111, 112, 113 |
| Technics | 118, 119, 121 |
| Victor | 132, 133 |
| Yamaha | 101, 102 |




## Codes for Cable Box

| Brand | Code |
|---|---|
| ABC | 124 |
| Archer | 125, 132 |
| Cableview | 105, 132 |
| Citizen | 105, 122 |
| Curtis | 112, 113 |
| Diamond | 124, 125, 132 |
| Eagle | 129 |
| Eastern | 134 |
| GC Brand | 105, 132 |
| Gemini | 122 |
| General Instrument/Jerrold | 111, 119, 120, 121, 122, 123, 124, 125, 126, 127 |
| Hamlin | 112, 118, 140, 141, 142, 145 |
| Hitachi | 103, 124 |
| Macom | 103, 104, 105 |
| Magnavox | 133 |
| Memorex | 130 |
| Movietime | 105, 132 |
| Oak | 102, 137, 139 |
| Panasonic | 109, 110, 114 |
| Philips | 106, 107, 128, 129, 130 |
| Pioneer | 101, 116 |
| Pulsar | 105, 132 |

| Brand | Code |
|---|---|
| Puser | 132 |
| RCA | 115 |
| Realistic | 132 |
| Regal | 112, 118, 140, 141, 142, 145 |
| Regency | 134 |
| Rembrandt | 105, 132, 137 |
| Samsung | 105 |
| Scientific Atlanta | 111, 112, 113 |
| Slmark | 101, 105 |
| Sprucer | 105, 110 |
| Stargate | 105, 132 |
| Tel eview | 101, 105 |
| Texscan | 144 |
| Tocom | 135 |
| Toshiba | 104 |
| Unika | 125, 132 |
| Universal | 122, 132 |
| Videoway | 106 |
| Viewstar | 129, 130 |
| Zenith | 100, 117 |
| Zenith /Drae Satellite | 100 |



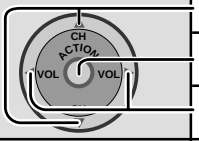
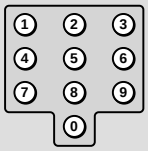

## Codes for DBS

| Brand | Code |
|---|---|
| Dish Network | 105, 115, 116 |
| (Echostar) | |
| Echo Star | 105 |
| Express VU | 105, 115 |
| G.E. | 106 |
| G.I. | 108 |
| (General Instrument) | |
| Gradiente | 114 |
| Hitachi | 103, 111, 112 |
| HNS (Hughes) | 103 |

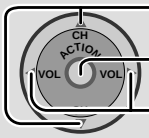
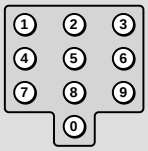
| Brand | Code |
|---|---|
| Magnavox | 101, 102 |
| Panasonic | 104 |
| Philips | 101, 102 |
| Primestar | 108 |
| Proscan | 106, 109, 110, 113 |
| RCA | 106, 109, 110, 113 |
| Sony | 107 |
| Star Choice | 103, 108 |
| Toshiba | 100 |
| Uniden | 101, 102 |

# Mode Operational Key Chart

This chart defines which keys that are operational after programming (if needed), while in the selected remote control mode TV, DTV, CABLE, DBS, VCR, DVD ...etc.

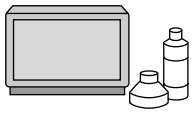
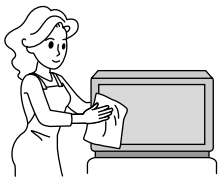
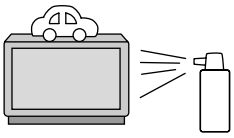
| KEY NAME | TV MODE | DTV MODE | CABLE MODE | DBS MODE |
|---|---|---|---|---|
| POWER | POWER | POWER | POWER | POWER |
| SAP | SAP ON/OFF | – | – | – |
| MUTE | MUTE | TV MUTE | CBL MUTE | TV MUTE |
| ASPECT | TV ASPECT | DTV ASPECT | – | DBS ASPECT |
| TV/VIDEO | TV INPUT SW | TV INPUT SW | TV INPUT SW | TV INPUT SW |
| LIGHT | REMOTE BUTTONS | REMOTE BUTTONS | REMOTE BUTTONS | REMOTE BUTTONS |
|  | CHANNEL UP/DOWN | NAVIGATION UP/DOWN | CABLE CHANNEL UP/DOWN | DBS NAVIGATION UP/DOWN |
| | ACTION | ACTION | ENTER | DBS ACTION |
| | VOL + / – | NAVIGATION RIGHT/LEFT | CABLE VOL + / – | DBS NAVIGATION RIGHT/LEFT |
| BBE MENU | – | MENU | – | DBS MENU |
| RECALL | DISPLAY | PROGRAM INFO. | TV DISPLAY | DBS PROG.INFO |
| EXIT | – | EXIT (EPG)ELECTRONIC PROGRAM GUIDE | – | DBS EXIT |
| PAGE | – | – | – | DBS PAGE UP/DOWN |
| GUIDE | – | GUIDE (EPG)ELECTRONIC PROGRAM GUIDE | – | DBS GUIDE |
|  | Select Channel | Select Channel | Select Channel | Select Channel |
| R-TUNE | PREVIOUS CHAN OR VIDEO MODE | PREVIOUS STB CHAN | CABLE PREVIOUS | DBS PREVIOUS |
| PROG | – | DTV PROGRAM/DASH | – | DBS PROGRAM/DASH |
| PIP MIN REW / PIP MAX FF | PIP MINIMIZE/ MAXIMIZE | – | – | – |
| PLAY | – | – | – | – |
| PAUSE | – | – | – | – |
| STOP | – | – | – | – |
| REC | – | Info (EPG) ELECTRONIC PROGRAM GUIDE | VCR RECORD | DBS RECORD |
| FREEZE TV/VCR | PIP FREEZE | – | – | TV/DBS SWITCH |
| PIP CH VCR CH | PIP or SPLIT CHAN UP/DOWN | – | TV CHANNEL UP/DOWN | DBS CHANNEL UP/DOWN |
| SEARCH OPEN/CLOSE | PIP SEARCH | – | – | – |
| PIP | PIP ON/OFF | – | – | – |
| SPLIT | SPLIT ON/OFF | – | – | – |
| MOVE | MOVE PIP | – | – | – |
| SWAP | PIP or SPLIT SWAP | – | – | – |

# Operating peripheral equipment using the remote control

| KEY NAME | VCR MODE | DVD MODE (DVD) | DVD MODE (CD) | AUX MODE (VCR2) | AUX MODE (TAPE) | RCVR MODE |
|---|---|---|---|---|---|---|
| POWER | POWER | POWER | POWER | POWER | POWER | POWER |
| SAP | – | – | – | – | – | – |
| MUTE | TV MUTE | TV MUTE | RCVR MUTE | TV MUTE | RCVR MUTE | RCVR MUTE |
| ASPECT | – | – | – | – | – | – |
| TV/VIDEO | TV INPUT SW | TV INPUT SW | – | TV INPUT SW | TV INPUT SW | TV INPUT SW |
| LIGHT | REMOTE BUTTONS | REMOTE BUTTONS | REMOTE BUTTONS | REMOTE BUTTONS | REMOTE BUTTONS | REMOTE BUTTONS |
|  | VCR CHAN UP/DOWN | NAVIGATION UP/DOWN | NEXT/PREVIOUS TRACK | VCR CHANNEL UP/DOWN | – | TUNER +/– |
| | TV ACTION | SELECT | – | TV ACTION | – | – |
| | TV VOLUME +/– | NAVIGATION UP/DOWN | RCVR VOLUME UP/DOWN | TV VOLUME +/– | RCVR VOLUME +/- | RCVR VOLUME +/- |
| BBE MENU | – | DVD MENU | – | – | – | – |
| RECALL | ONSCREEN VCR DISPLAY | DVD DISPLAY | TIME FORMAT | ONSCREEN VCR DISPLAY | – | – |
| EXIT | – | – | – | – | – | – |
| PAGE | – | SKIP +/– | SKIP +/– | – | – | – |
| GUIDE | – | TITLE | NEXT TRACK | – | – | – |
|  | Select Channel | Select Chapter Number | Select Track Number | Select Channel | – | 1.... AV1<br>2.... AV2<br>3.... AV3<br>4.... AV4<br>5.... CD<br>6.... TUNER<br>7.... PHONO<br>8.... TAPE<br>9.... AUX |
| R-TUNE | – | – | – | – | DECK A/B | – |
| PROG | – | – | – | – | – | – |
| PIP MIN REW / PIP MAX FF | VCR REW/FF | SKIP SEARCH <<REW/>>FF | SEARCH REW/FF | VCR REW/FF | TAPE REW/FF | SURROUND –/+ |
| PLAY | PLAY | PLAY | PLAY | PLAY | PLAY | – |
| PAUSE | PAUSE | PAUSE | PAUSE | PAUSE | PAUSE | – |
| STOP | STOP | STOP | STOP | STOP | STOP | – |
| REC | VCR RECORD | – | – | VCR RECORD | TAPE RECORD | – |
| FREEZE TV/VCR | TV/VCR SWITCH | – | – | TV/VCR SWITCH | – | – |
| PIP CH VCR CH | VCR CHANNEL UP/DOWN | – | – | VCR CHANNEL UP/DOWN | – | – |
| SEARCH OPEN/CLOSE | – | OPEN/CLOSE | OPEN/CLOSE | – | OPEN/CLOSE | – |
| PIP | – | – | – | – | – | – |
| SPLIT | – | – | – | – | – | – |
| MOVE | – | – | – | – | – | – |
| SWAP | – | – | – | – | – | – |

# Cleaning

To ensure continued excellent performance by this product, periodic cleaning is recommended.

| | | | |
|---|---|---|---|
|  | The unit contains many plastic parts. For this reason DO NOT use benzine, thinner or other chemicals to clean the unit. |  | Dust will accumulate on the picture screen. Please wipe with a soft cloth from time to time. If you use a chemically treated cloth, please be careful to follow the instructions that come with the cloth. |
|  | DO NOT bring into contact with insecticide or other volatile substances.<br>DO NOT allow the unit to come into contact for extended periods with rubber or vinyl products. | | Remove dirt and soiling by wiping with a light cloth.<br>Even if the unit is heavily soiled, do not apply cleaner directly to the unit. Soak a cloth in a solution of neutral cleanser thinned with water. Then wring out the cloth, wipe the unit clean, and finish by wiping with a dry cloth. |

# Specifications

| | | CT-30WX52 | CT-34WX52 |
|---|---|---|---|
| **Power Source** | | AC 120 V, 60 Hz | AC 120 V, 60 Hz |
| **Power Consumption** | | Average use : 170 W (Maximum Current 3.6 A)<br>Stand-by condition : 0.2 W | Average use : 170 W (Maximum Current 3.6 A)<br>Stand-by condition : 0.2 W |
| **CRT** | | 30-inch, 16 : 9 aspect ratio | 34-inch, 16 : 9 aspect ratio |
| **Screen Size** | | 25.95 ” (659.1 mm) (W) ×<br>14.59 ” (370.7 mm) (H) ×<br>29.77 ” (756.2 mm) (diagonal) | 29.36 ” (745.9 mm) (W) ×<br>16.5 ” (419.5 mm) (H) ×<br>33.68 ” (855.7 mm) (diagonal) |
| **Dimensions ( W × H × D )** | | 32.6 ” (827 mm) × 22.8 ” (579 mm) ×<br>21.1 ” (535 mm) | 36.4 ” (926 mm) × 30.6 ” (651 mm) ×<br>23.1 ” (584 mm) |
| **Mass (Weight)** | | 126 lb. (57 kg) Net | 172 lb. (78 kg) Net |
| **Channel Capability-181** | | VHF-12 : UHF-56 : Cable-125 | |
| **Sound** | **Speaker** | 4 Speakers | |
| | **Audio Output** | 30 W [ 15 W + 15 W ] ( 10 % THD ) | |
| | **Headphones** | M3 (3.5 mm) Jack × 1 | |
| **FEATURES** | | Two screen display fuctions<br>BBE<br>CLOSED CAPTION | 3D Y/C FILTER<br>LINEAR PIP<br>V-Chip |
| **Accessories Supplied** | | Remote control Transmitter<br>R6 (AA) Battery × 2 | EUR7603Z70 |
| **Operating Conditions** | | Temperature : 34 °F - 104 °F (0 ° – 40 °C)<br>Humidity : 20 % - 80 % (non-condensing) | |
| **Connection Terminals** | AV INPUT 1- 4 | VIDEO (Phono Jack Type)<br>S-VIDEO (Mini DIN 4-pin)<br>AUDIO L-R (Phono Jack Type × 2) | 1.0 Vp-p (75 Ω)<br>Y : 1.0 Vp-p (75 Ω), C : 0.286 Vp-p (75 Ω)<br>0.5 Vrms |
| | AV PROG. OUT | VIDEO (Phono Jack Type)<br>AUDIO L-R (Phono Jack Type × 2) | 1.0 Vp-p (75 Ω)<br>0.5 Vrms |
| | TO AUDIO AMP | AUDIO L-R (Phono Jack Type × 2) | 0.5 Vrms |
| | COMPONENT VIDEO INPUT1-2 | Y<br>$P_B$ / $P_R$<br>AUDIO L-R (Phono Jack Type × 2) | 1.0 Vp-p (including synchronization)<br>± 0.35 Vp-p<br>0.5 Vrms |

**Note:**
Design and Specifications are subject to change without notice. Weight and Dimensions shown are approximate.

**Customer's Record**
The model number and serial number of this product can be found on its back cover. You should note this serial number in the space provided below and retain this book, plus your purchase receipt, as a permanent record of your purchase to aid in identification in the event of theft or loss, and for Warranty Service purposes.

Model Number _____ Serial Number _____

**Panasonic Consumer Electronics Company, Division of Matsushita Electric Corporation of America**
One Panasonic Way Secaucus, New Jersey 07094

**Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico Inc. ("PSC")**
Ave. 65 de Infanteria, Km 9.5
San Gabriel Industrial Park,
Carolina, Puerto Rico 00985

**Panasonic Canada Inc.**
5770 Ambler Drive
Mississauga, Ontario
L4W 2T3

Printed in Japan
MBS0402S1052(MS)